# Rio Blanco Oil Shale Project

## SECOND SEMI-ANNUAL REPORT
## INTERIM ENVIRONMENTAL STUDIES
## OCTOBER, 1977

Gulf Oil Corporation
and
Standard Oil Company (Indiana)
9725 East Hampden Avenue, Denver, Colorado 80231

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# INTERIM ENVIRONMENTAL STUDIES
# SECOND SEMI-ANNUAL REPORT

SUBMITTED TO
RIO BLANCO OIL SHALE PROJECT
DENVER, COLORADO

SUBMITTED BY
ECOLOGICAL SCIENCES DIVISION
NUS CORPORATION
PITTSBURGH, PENNSYLVANIA
HOUSTON, TEXAS
AND
DENVER, COLORADO

OCTOBER 1977

PREPARED BY: Thomas M. Ivory
Thomas M. Ivory
Project Manager

APPROVED BY: Paul V. Morgan
Paul V. Morgan
Vice President and General
Manager
Ecological Sciences Division

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# INTRODUCTION

In September 1976, the RBOSP was granted a one-year suspension from activities on the Tract C-a oil shale lease. During that period, RBOSP conducted interim environmental studies for the purposes of: (1) obtaining additional baseline data for selected parameters; (2) further exploring problem areas; and (3) maintaining the continuity of baseline and monitoring data. To achieve these goals, limited air quality, meteorology, terrestrial, aquatic, and hydrology data were collected.

Results of the first six months of data collection were reported in the first Interim Studies Semi-Annual Report, dated March 31, 1977. The methods used during the interim studies were presented in detail in that report and are not repeated herein. Results of the second six-month period (March through August 1977), and comparisions of interim and baseline data are presented in this report.

# SECTION I

# ATMOSPHERIC STUDIES

SECTION I - ATMOSPHERIC STUDIES

The interim air quality and meteorological monitoring plan was initiated in February 1977 and completed August 31, 1977. Under this plan one of the baseline monitoring stations was retained and the other three were taken off-line. The operating station was at the baseline Site 1 location just west of the western tract boundary (148, 500E, 227,034N).

# CHAPTER 1 - AIR QUALITY AND METEOROLOGY

## 1.1 OBJECTIVES

The objectives of the interim environmental monitoring program were to:

- Acquire meteorology and air quality data for the period February 1, 1977 through August 31, 1977
- Identify conditions under which anomalous data have been acquired during the entire monitoring period
- Specify in greater detail the natural climatic, meteorological and air quality environment on the tract
- Establish the basis for revision of the detailed development plan to select monitoring parameters that will assure an accurate assessment of the impact of tract development on the ambient air environment
- Integrate baseline and interim data into a consolidation assessment report.

## 1.2 METHODS

The instrumentation used for the baseline data acquisition was maintained with a few changes in sensors and operation to simplify data acquisition and to accommodate the interim monitoring schedule. The data acquisition com-

puter was reprogrammed to service the one monitoring site. A complete and accurate set of program documentation was generated. Several major pieces of equipment were reconditioned. The magnetic tape deck and station teletype were reconditioned, the standby - emergency power supplies were serviced to reduce station noise levels and repair electronic component damage apparently caused by lightning. Frequent, short-term interruptions in commercial primary power continued to be a problem.

The 360$^{0}$ wind direction sensors were replaced with NOIC certified 540$^{0}$ units to eliminate problems with the back-up strip chart recordings of wind direction.

The monitoring site was visited on an average of every other day by the site technician. A station checklist was completed for each week of operation. A zero and span test of the gas monitoring instruments was conducted weekly. Control charts were made to evaluate instrument stability and performance. During the interim monitoring period the site was subjected to voluntary EPA audits under the Western Energy Quality Assurance Program. The performance of the NUS Rockville air quality laboratory was also subjected to audit through a collaborative interlaboratory testing program.

## 1.3 RESULTS

Most of the air quality and meteorological data acquired during the interim period (Appendices A & B) does not differ significantly from data acquired during the baseline period. Precipitation continued to be lower than the historical norm and there were very few activities on and around the tract that would contribute to the background levels of air pollutants. Ozone concentrations remained high considering there is no known activity or atmospheric chemical reaction between other pollutants that is expected to result in ozone generation. Several suspected anomalies in the baseline data set were investigated during the interim monitoring period.

(a) Total Suspended Particulate (TSP) Measurements - During the baseline monitoring period the range in TSP measurements was larger than during the interim period.

Values of less than 1 $\mu g/m^3$ were reported on a number of occasions. During the Interim monitoring period significantly different results were obtained. Two high-volume samplers were operated every third day. One was located at ground level (1.5 m) the other at an elevation of 6 m. Samples were collected simultaneously. The geometric mean value of all samples taken at both levels was approximately twice the mean obtained during the two-year baseline period. The minimum sample obtained was 3.4 $\mu g/m^3$. The minimum for both levels was measured on the same day. The period maximum was 60.2 $\mu g/m^3$. The difference in the means of measurements obtained at the two levels was less than five percent (1.0 $\mu g/m^3$). The range of the samples was 17.8:1 as opposed to a range of 211:1 observed during the baseline period.

The results obtained during the interim monitoring period are more accurate than those obtained during the baseline period. Filters were carefully conditioned, weighed against standards, and the collector flow rates were corrected for measured station atmospheric pressure. Flow rates were measured frequently and the calibration agreed within five percent with the EPA audit values. Interlaboratory weighings were accurate to 0.1 milligram.

The most significant difference between interim and baseline TSP data was the large increase in the observed mean value. There were no site activities which would account for the difference, wind speeds were comparable, and there was excellent correlation between sampling levels. The most likely explanation is that the baseline measurements did not include a full correction for the flow rate at station pressure (580 mm Hg). The reduction in the observed range of TSP values was due to two factors: (1) filter conditioning prior to weighing, and (2) the low level of site activity, primarily traffic, that would produce airborne particulate matter.

(b) Ozone Concentration Measurements - During the baseline monitoring period ozone concentration measurements were obtained that were somewhat higher than expected in view of the fact that there were no common precursors of smog-like photochemical reactions and no other obvious sources. Measurements obtained during the interim monitoring confirmed the presence of elevated ozone concentrations. The instrumentation was calibrated by back-

titrating nitrogen oxide (NO) with ozone. The instrumentation was audited by EPA, and the calibrations confirmed. An independent wet chemical sampling using the neutral buffered potassium iodide reagent was performed at three different times and the results compared with the automated instrument measurements. The two values agreed within 10 percent for 30-minute sampling times.

During the interim period, hourly average ozone concentrations were exceeded approximately 100 times. The interim measurements of ozone concentration were compared with frontal passages occurring during the monitoring period. This was done to see whether the local ambient air concentration of ozone was influenced by possible downwash of stratospheric ozone preceeding frontal passage. There was no significant increase in concentration during any eight-hour period up to 48 hours prior to frontal passage through the site area. Frontal passages are relatively mild, seldom producing squall lines of significant intensity. Based on current data, the elevated ozone concentrations do not appear to be transported into the region, but are created in the immediate vicinity of the monitoring site.

(c) Non-methane Hydrocarbon Concentration - During the baseline and interim monitoring periods, non-methane hydrocarbon concentrations occasionally exceeded federal and state standards. The standards are based primarily on the effects present in urban areas where hydrocarbon emissions from automobiles are the precursors of subsequent oxidant (ozone) formation. The standard applies only for the hours 6 - 9 a.m., the urban rush-hour period. On the site, there is no rush-hour and yet the non-methane hydrocarbon standards are occasionally exceeded.

Several sources of hydrocarbon emissions have been suggested for the site area. There are a number of capped gas well drill holes in and around the tract area. The presence of gas in the ambient atmosphere may be the result of permeation up through the surface. Natural gas may be saturated with light hydrocarbon fractions derived from petroleum. Another source may be the diurnal heating and cooling of exposed shale which volitizes light hydrocarbon fractions to release them to the ground level ambient air.

Another source of hydrocarbon may be emissions of compounds from vegetation. This source has been proven in the case of pine trees through the emission of turpines in remote areas. During the interim monitoring program, tests were conducted by sampling emissions from local vegetation during the spring flowering season. Collections of stems, leaves, and flowers were placed in a confined volume (plastic bag) and the captive air volume sampled. No significant increase in hydrocarbon concentration could be detected even though there were definite odors associated with the materials collected.

(d) An estimate of the atmospheric stability in the site area is obtained from a vertical temperature differential measurement on the 60-m meteorological instrument tower. The tower is located on a small knoll at the apex of one of the gulches traversing the tract. As a result of nighttime radiation cooling of the ground surface, drainage wind flow occurs down into the gulch. In reviewing the baseline data set for characteristic behavior of the vertical temperature measurement it was observed that the change from daytime to nighttime wind flow was accompanied by a slower change in the stability estimate than might be expected. A review of the air temperature difference between the 10-m and 60-m levels on the tower indicates that there is some subsidence which allows warmer air to contact the upper level sensor for a longer period of time than would be the case in flat terrain.

The practical effect of this subsidence on the estimation of atmospheric stability is minimal. The differential temperature data were used as input to the mathematical models for determining atmospheric transport of tracer materials. The predicted transport was in good agreement with measured values showing that the atmospheric stability estimates derived from the differential temperature measurements were satisfactory. The alternate measure of stability obtained from wind sigma values was not satisfactory for use in the terrain of the tract area.

(e) The baseline data set was reviewed to determine what factors might be pertinent in the selection of sites and parameters for a permanent monitoring program to evaluate the impact of tract development on the air environment.

The baseline data showed little difference in most parameters between the four baseline monitoring stations. This is to be expected where there are no localized sources of the parameters monitored. There were two exceptions of significance: (1) suspended particulate, and (2) ozone. The differences in particulate are explained by the location of the monitoring sites with respect to traffic on unpaved roads, and the difference in ozone concentration is suspected to be due to differences in elevation and topography between the monitoring sites.

Mathematical modeling of the diffusion of air contaminants from tract development produced a series of concentration isopleths for various emissions over various averaging time intervals. The maximum impact was predicted to occur at different geographic locations for separate parameters and different averaging times. For the relatively low ground level concentrations predicted by the model, the maximum environmental impact is expected to result from the chronic exposure of vegetation and materials to increased contaminant levels rather than short-term acute exposures. This is a result of the still relatively low maxima of short-term exposures which are predicted to occur.

It appears that a more representative measure of impact will be achieved if two new monitoring locations are established at geographical locations representing maximum ground level concentrations of sulfur dioxide and particulate. Vegetation is more sensitive, in general, to sulfur dioxide than to nitrogen oxides so the location of additonal monitoring sites is based on the expected dispersion of the sulfur oxides.

Correlation of wind speed and TSP is very weak in the baseline data. This would indicate relatively large particle size and appreciable binding in the ground surface layers. The interim data on TSP show no essential difference in concentration between 1.5 m and 6.0 m above the ground indicating little wind errosion of particles from the surface. However, when the surface is subjected to mechanical wear by vehicular traffic, the particles are broken

into significantly smaller size and do become airborne. As a result TSP loading increases downwind of roadways following traffic. An additional onsite TSP monitoring site was selected to measure the influence of increased traffic levels during tract development.

The reason for the difference in the diurnal variation on ozone concentration between baseline stations 1 and 3 is not obvious. The difference between the mean concentration is within the experimental error of the instrumentation (.005 ppm). Measurments of ozone concentration at Site 3 will be resumed under the permanent monitoring plan.

It was recommended that the fully instrumented Site 1 be retained as the historical baseline monitoring site. Nearly three years of air quality and meteorological data representing relatively undisturbed background conditions are on file. The long historical record will provide a measure of the variability of baseline conditions against which to determine the confidence level of future changes.

## 1.4 DATA TREATMENT

The air quality data acquired during the interim period have been carefully reviewed with respect to its validity. The procedures outlined in the EPA Quality Assurance Handbook for Air Pollution Measurements (EPA-600/9-76-005), March 1976, Section No. 1.4.17, have been used in this review. These procedures establish criteria for data acceptable for the National Aerometric Data Bank (NADB). By adopting these procedures the resulting data should be acceptable to regulatory agencies because it meets uniform standards.

The procedures establish a screening criteria to insure that the data meet standards for representativeness, instrument averaging time, duration of sampling, and comparability.

The data are representative of the tract area. There are no local point sources of pollutants to bias measurements for selected wind directions, there are no activities in the site area that are of a seasonal nature, and the data are relatively complete.

The data are collected continuously and recorded as 15-minute average values. The data are processed to combine four 15-minute averages into a one-hour average. There are 24 data points representing hourly averages for each day.

The data were collected over a period of more than three consecutive months so that at least quarterly statistics can be calculated.

The data are comparable. They are in consistent units and have been acquired by applying standard methodologies (Federal Reference Methods).

The data are complete in that with continuous measurement more than 75 percent of the total possible observations are present. Intermittent data (TSP) were collected to obtain more than 27 samples per quarter on an every third day sampling schedule.

Data values below minimum detectable limits have been handled by inserting a constant approximately equal to one-half the minimum detectable limit for each method and analysis technique. To determine these constants the automated instrument performance standards published in the Federal Register (CFR Title 40, Part 51.77a) Vol. 41, No. 232, Wednesday, December 1, 1976 (p 52694) were used. The lower detectable limits for sulfur dioxide, photochemical oxidants and nitrogen dioxide is 0.01 ppm, and for carbon monoxide, 1.0 ppm. Since the same methodology and instrumentation were used to monitor hydrogen sulfide, a lower limit of 0.01 ppm was established for this parameter. Since the measured levels of methane and total hydrocarbon was always greater than the lower detectable limit, no data adjustments were required.

The data have been reviewed and compared to equivalent data aquired during the baseline study period. The differences in reported minimum values are due to the change in reporting procedures discussed earlier in this section. The following describes the significant differences observed between the two data reporting periods.

(a) Total Suspended Particulate (TSP) - Figures 1 and 2 show plots of the cumulative frequency of Occurrence of TSP concentration observed during the interim period for the ground level and elevated samplers. Level 1 is the ground. The interim data are plotted as a series of boxes, and a curve representing the axis of the data distribution has been drawn through the points. A second line (dashed) has been added to the plot to show the axis of the data distribution obtained from baseline measurements. The interim data are made up of a total of 63 samples at each level taken on an every third day schedule.

There are two significant differences between the data sets. One, the geometric mean (50 on the cumulative percent scale) of the interim data is approximately twice that of the baseline data; and two, the slope of the distribution observed during the interim period is substantially less than observed during the baseline period. There were no violations of any state or federal TSP concentration standards during the interim monitoring period.

The data were acquired very carefully and the procedure was audited several times. There are two possible explanations for the observed differences. One, site activity was very low during the interim period so there were few vehicles in the vicinity of the site; and two, a closer quality control on sample handling and conditioning resulted in more consistent results. The geometric standard deviation of the data obtained at the two sampling levels showed excellent correlation (1.84 vs 1.88).

(b) Sulfur Dioxide ($SO_2$) - The sensitivity of the sulfur dioxide detector was too low to produce reliable readings of the ambient air concentration of $SO_2$. More than 90 percent of the interim data recorded was less than the reliable threshold of detection of the chromatograph (0.01 ppm). Wet chemical ambient air samples were obtained on two occasions and the mean concentration was between 0.002 and 0.003 ppm. During the baseline period, the annual mean was 0.004 ppm which is probably an overestimate. There were no violations of state or federal standards for $SO_2$ during either the baseline or interim monitoring.

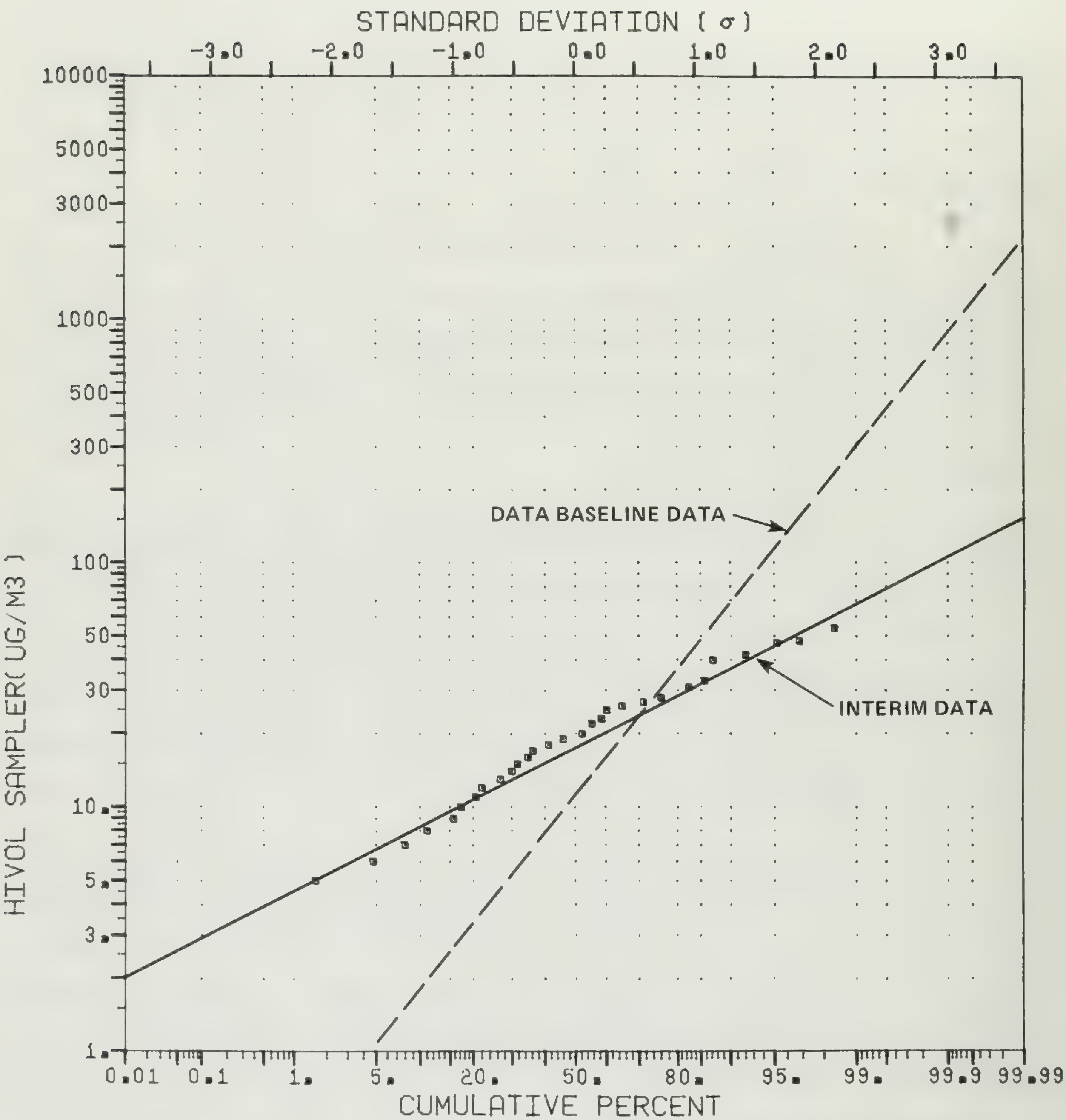


CHART TRACE

FIGURE 1
CUMULATIVE FREQUENCY OF OCCURRENCE OF TSP CONCENTRATION OBSERVED DURING THE INTERIM PERIOD 2/12/77 to 8/31/77 AT LEVEL 1.

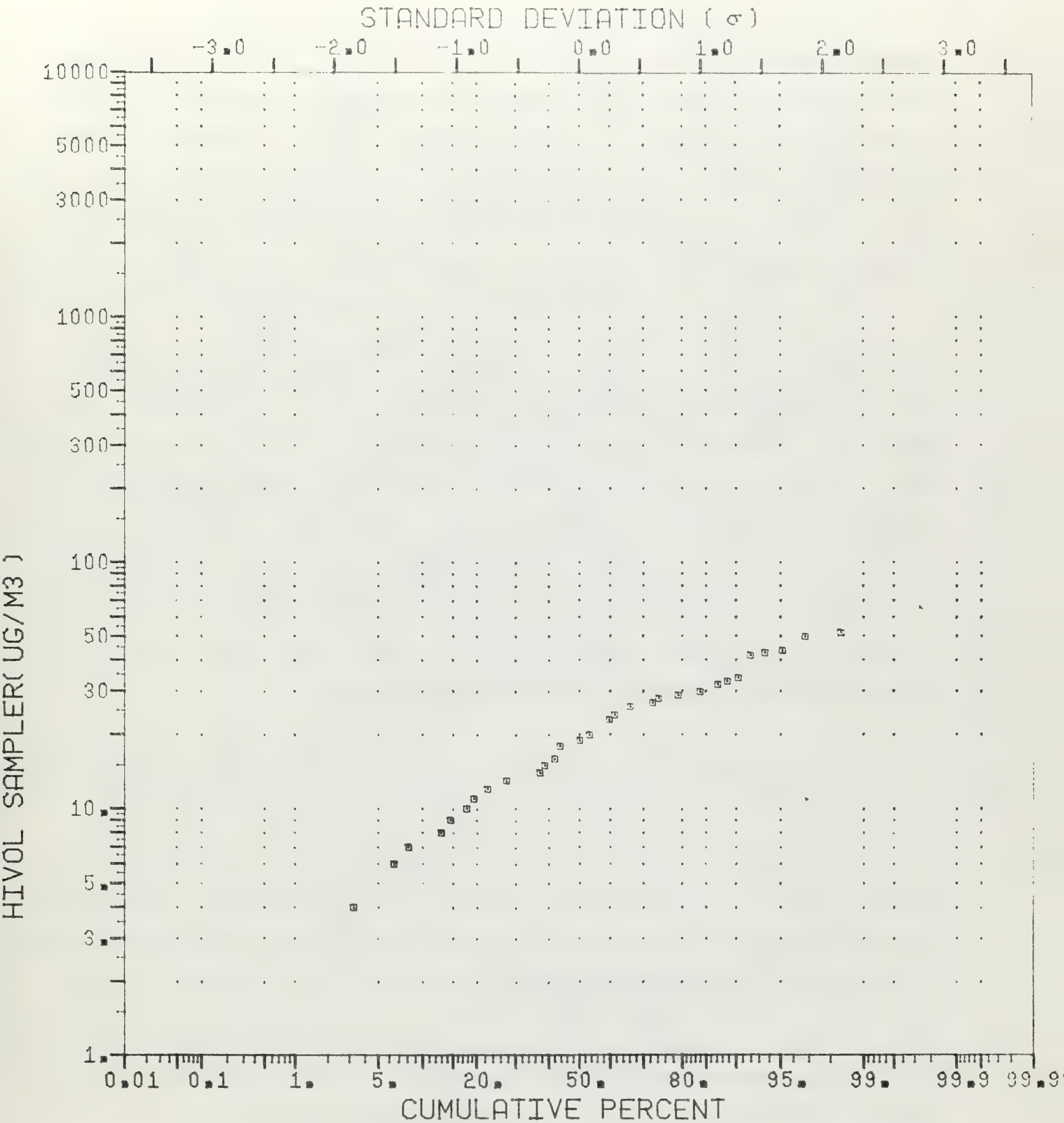



FIGURE 2
CUMULATIVE FREQUENCY OF OCCURRENCE OF TSP CONCENTRATION OBSERVED DURING THE INTERIM PERIOD 2/12/77 to 8/31/77 AT LEVEL 2.

(c) Carbon Monoxide (CO) - More than 90 percent of the data recorded from the carbon monoxide detector was below the reliable threshold of detection of the instrument (±1 ppm). The annual mean concentration reported for the baseline period was 0.55 ppm. The interim data mean was 0.42. Neither of these measurements is meaningful. An examination of the output of the detector shows an electrical signal with predominantly positive noise which produces a mean output signal in the absence of a sample. The highest value measured during the interim period was 2.50 ppm compared to a baseline maximum value of 4.21 ppm.

(d) Ozone ($O_3$) - The ozone measurements made during the interim period were reviewed carefully to determine whether or not the diurnal variation in concentration identified during the baseline period was substantiated. Arbitrary days from each month were compared by matching 15-minute average concentration values for 48-hour runs. The diurnal variations observed were quite pronounced throughout the entire interim period. The degree of the variation observed at Site 1 was substantially greater than was reported for the baseline period, and is very nearly as great as was reported for baseline measurements at Site 3. There has been some question whether the difference was real or an instrumental artifact. The interim data suggest that a major portion of the difference was probably due to the instrumentation.

The variation in ambient air concentrations of ozone are related strongly to the times of local sunrise and sunset. Figure 3 is a plot of four two-day periods spread over four months. This plot shows the distinct character of the daily concentration cycle. If only hourly average concentration values are used, much of the information contained in the plot is lost. Examination of the character of the data shows that the disappearance of ambient air ozone is more rapid than its appearance early in the morning. The peak levels of ozone seem to occur in late spring and early fall rather than in mid-summer. There is little difference in insolation during this period so the difference may be due to the variation in mean atmospheric temperatures and the greater chemical reaction rate of ozone at an elevated temperature.

The calibration of the site ozone detector was determined by wet chemical measurements and was cross checked during the Western Energy Quality Assurance

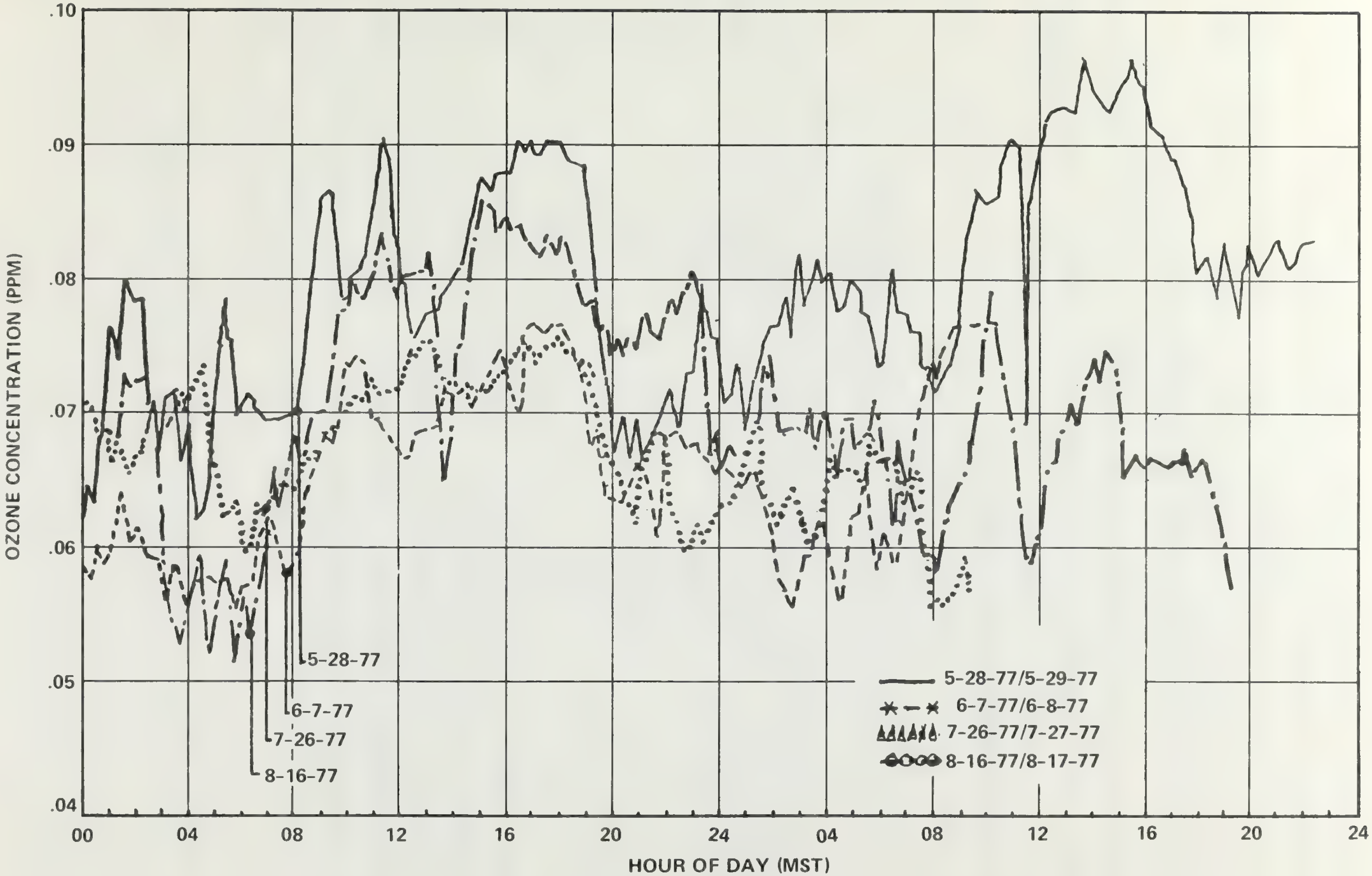



Figure 3

OZONE CONCENTRATION VERSUS TIME OF DAY

Program audit. The results of these calibrations indicate that the baseline data are probably an underestimate of the true ambient concentration by 16 to 20 percent. If the interim calibration is confirmed by additional tests, the number of times during which the concentration exceeds current state and federal standards will be increased substatially.

The interim monitoring data have been summarized in Table 1 to show the results obtained. The minimum value in most cases is an artificial one, substituted in lieu of a number which would be less than the average noise of the instrumentation used to make the measurement.

TABLE 1

INTERIM SUMMARY OF AIR QUALITY PARAMETERS
(February 1977 - August 1977)

| Parameter | Units | Minimum | Maximum | Mean |
|---|---|---|---|---|
| Ground level TSP | $\mu g/m^3$ | 5.0 | 59.0 | 19 (geometric) |
| Elevated TSP | $\mu g/m^3$ | 3.0 | 60.0 | 18 (geometric) |
| Ozone | ppm | 0.032 | 0.117 | 0.061 |
| Carbon monoxide | ppm | 0.5 | 2.50 | 0.55 |
| Methane | ppm | 1.12 | 1.70 | 1.25 |
| THC | ppm | 1.13 | 2.88 | 1.45 |
| Nitrogen oxides | ppm | .005 | 0.067 | .005 |
| Nitric oxide | ppm | .005 | 0.052 | .005 |
| Sulfur dioxide | ppm | .005 | .05 | .005 |
| Hydrogen sulfide | ppm | .005 | .005 | .005 |

# CHAPTER 2 - PRECIPITATION DATA

## 2.1 OBJECTIVES

The objective of these studies was to gather additional precipitation data during the interim monitoring period.

## 2.2 METHODS

The USGS installed six rain gaging stations in the vicinity of Tract C-a during baseline studies. At three of these stations storage type gages (where precipitation is collected and hand measured at regular intervals) were used. At the remaining three stations, recording type rain gages recorded cumulative precipitation as well as precipitation rate, for example, inches per hour, for individual storms. In addition, a tipping bucket rain gage was operated at the Site 1 meteorological tower during baseline and interim studies. Locations and descriptions of these gages are given in the first RBOSP Interim Semi-Annual Report (1977).

## 2.3 RESULTS AND DISCUSSIONS

The data from USGS precipitation gages taken during the second half of the interim program are shown on Figures 4 through 9. Precipitation over this period was highly variable. Precipitation in March and April was less than normal as it had been during previous months. May readings exceeded the amounts measured during baseline period (Figure 10 and Table 2). Few precipitation events were recorded in June. A normal precipitation pattern of one inch or more was observed during July.

Table 3 includes a comparison of the USGS Stake Springs recording precipitation gage with the RBOSP Site 1 precipitation gage.

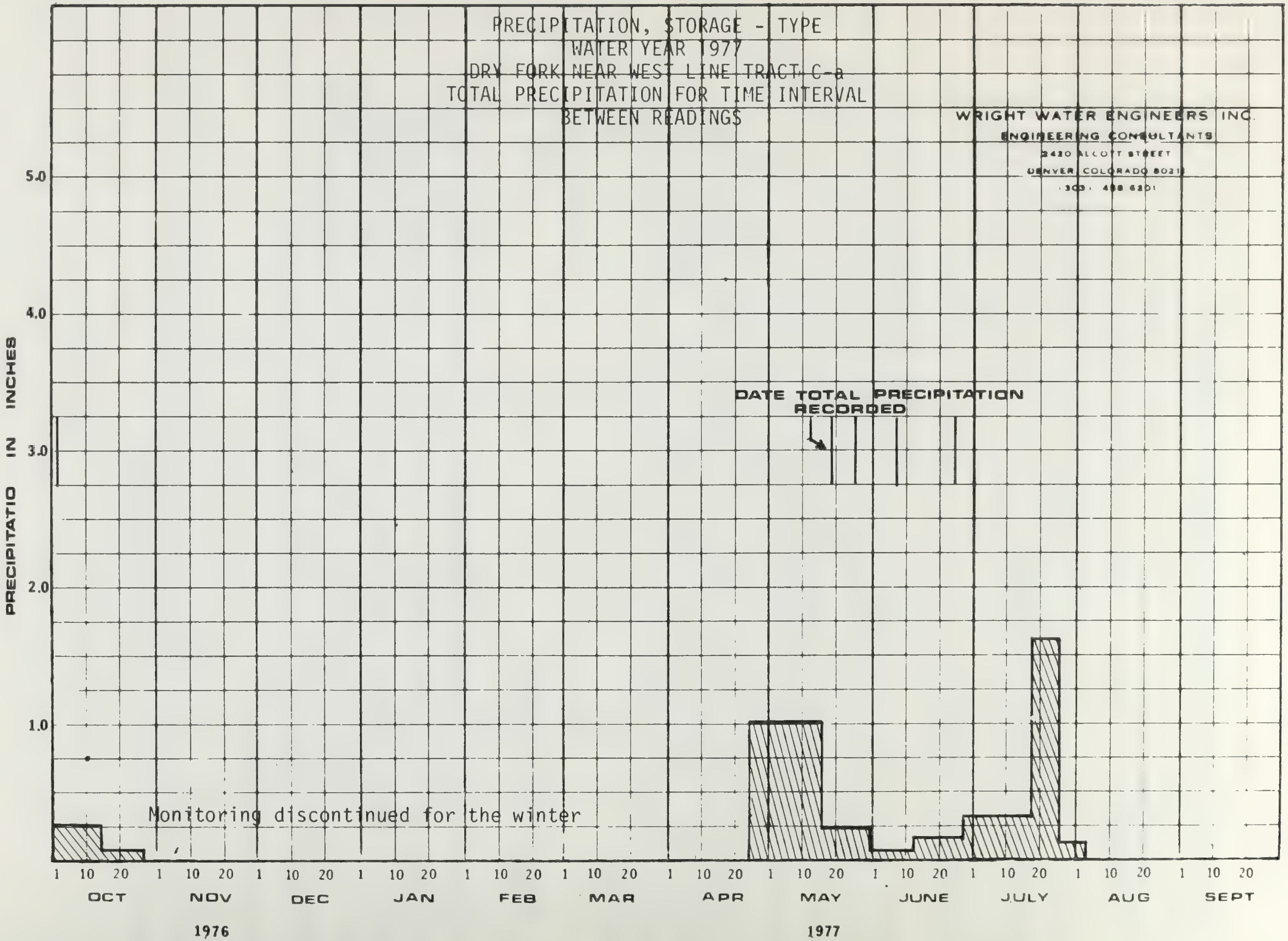



FIGURE 4

PRECIPITATION, STORAGE-TYPE, WATER YEAR 1977, DRY FORK NEAR WEST LINE TRACT C-a

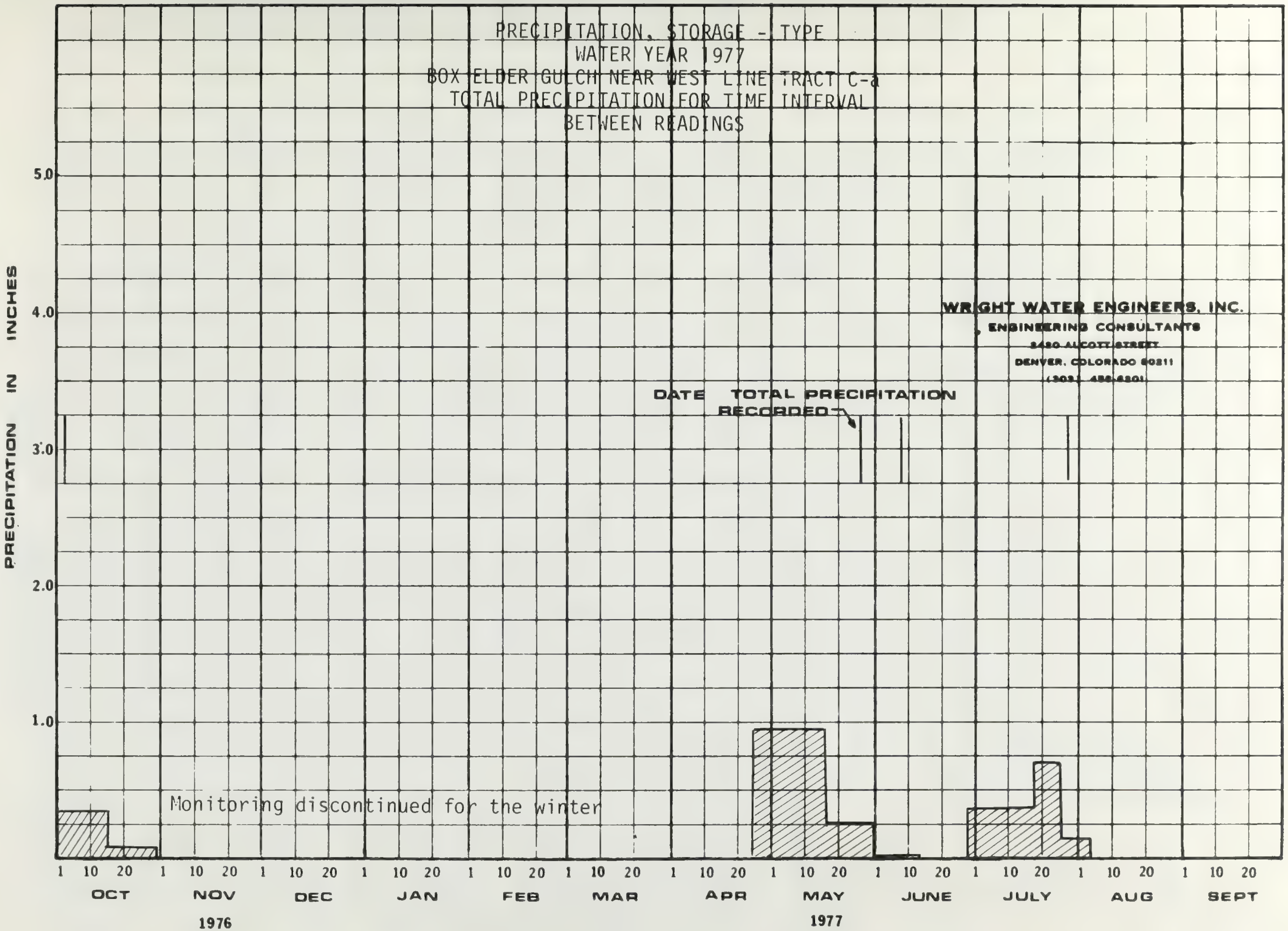



FIGURE 5

PRECIPITATION, STORAGE-TYPE, WATER YEAR 1977, BOX ELDER GULCH NEAR WEST LINE TRACT C-a

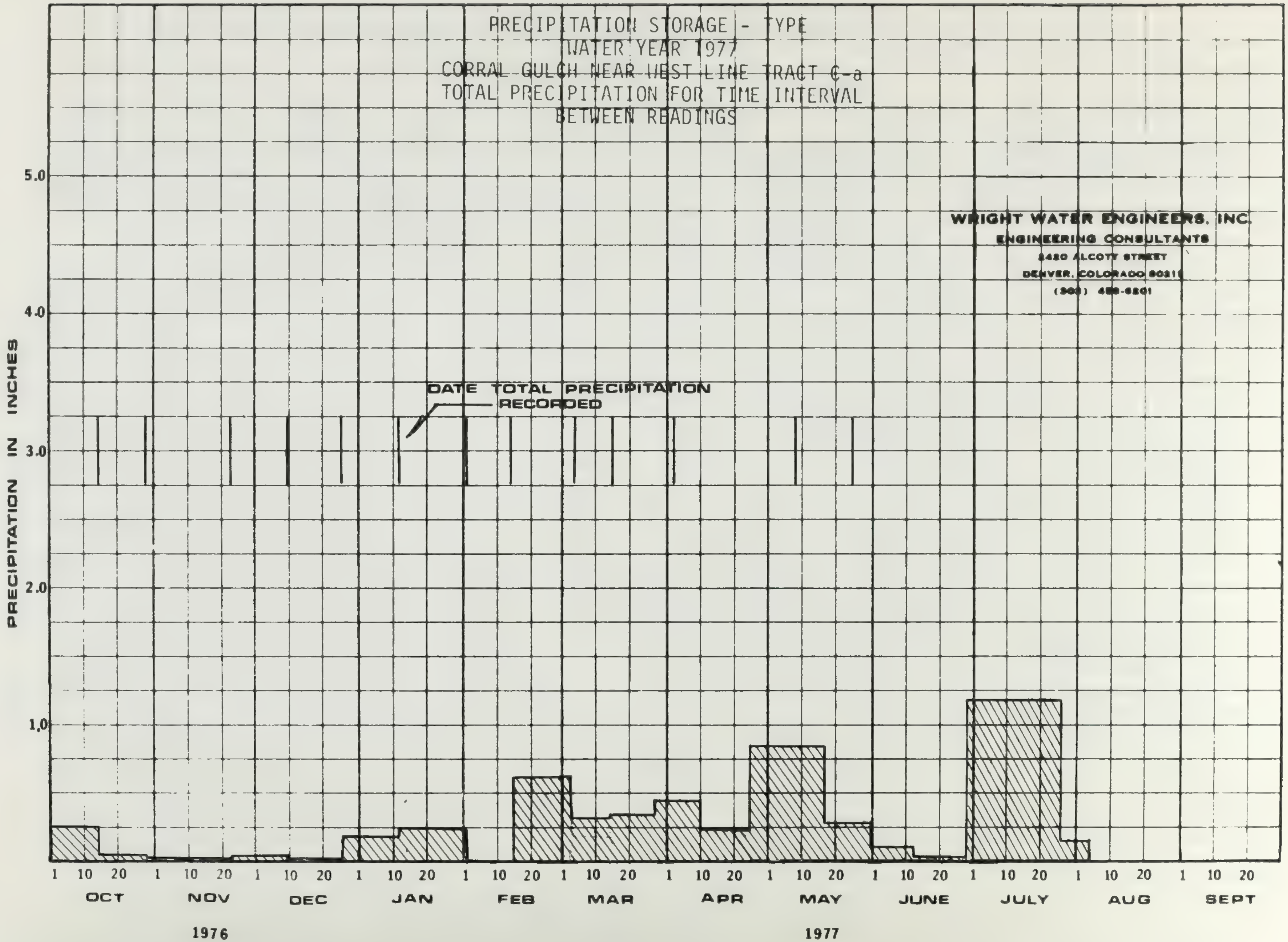



FIGURE 6

PRECIPITATION STORAGE-TYPE, WATER YEAR 1977, CORRAL GULCH NEAR WEST LINE TRACT C-a

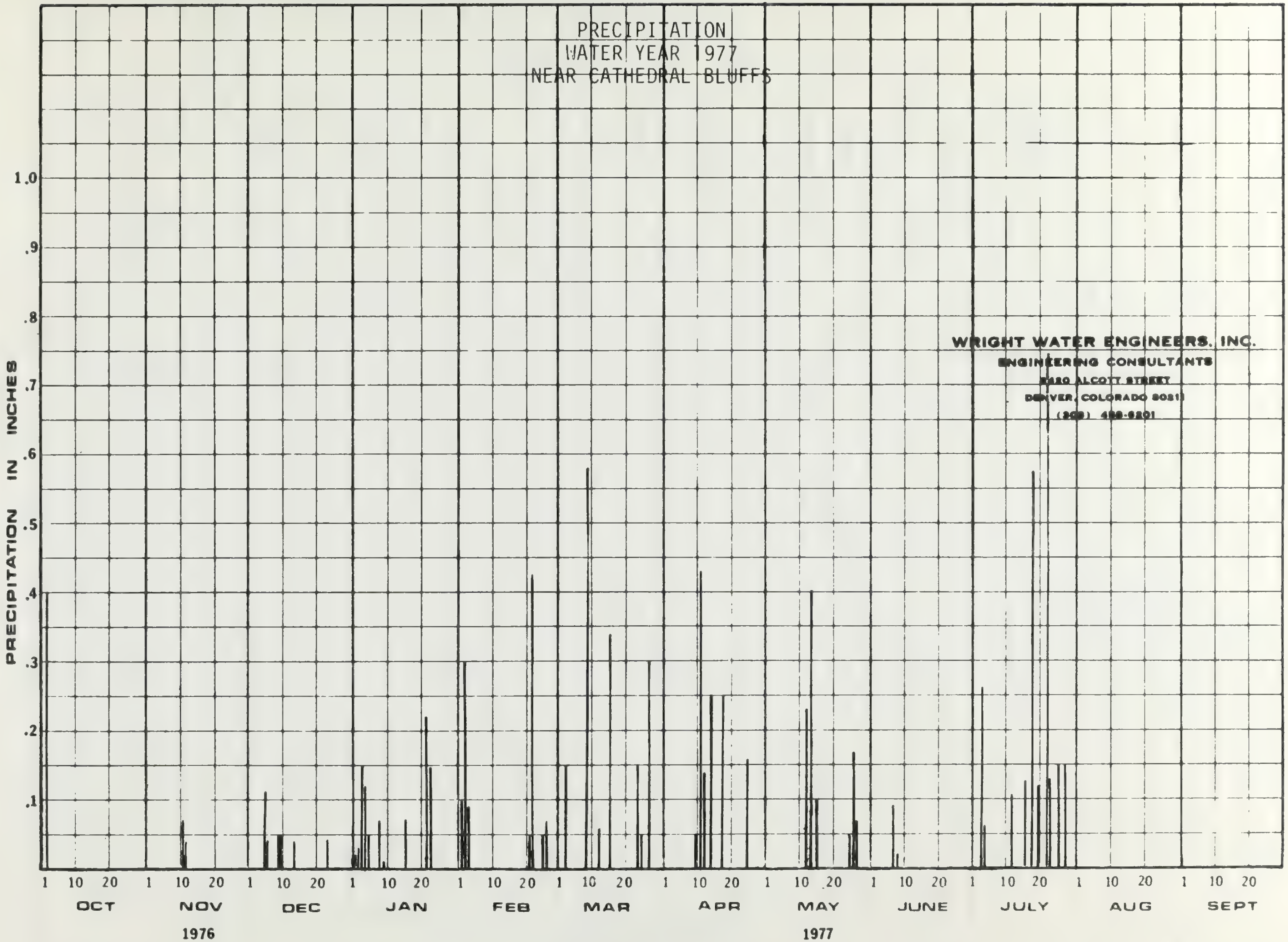



FIGURE 7

PRECIPITATION, WATER YEAR 1977, NEAR CATHEDRAL BLUFFS

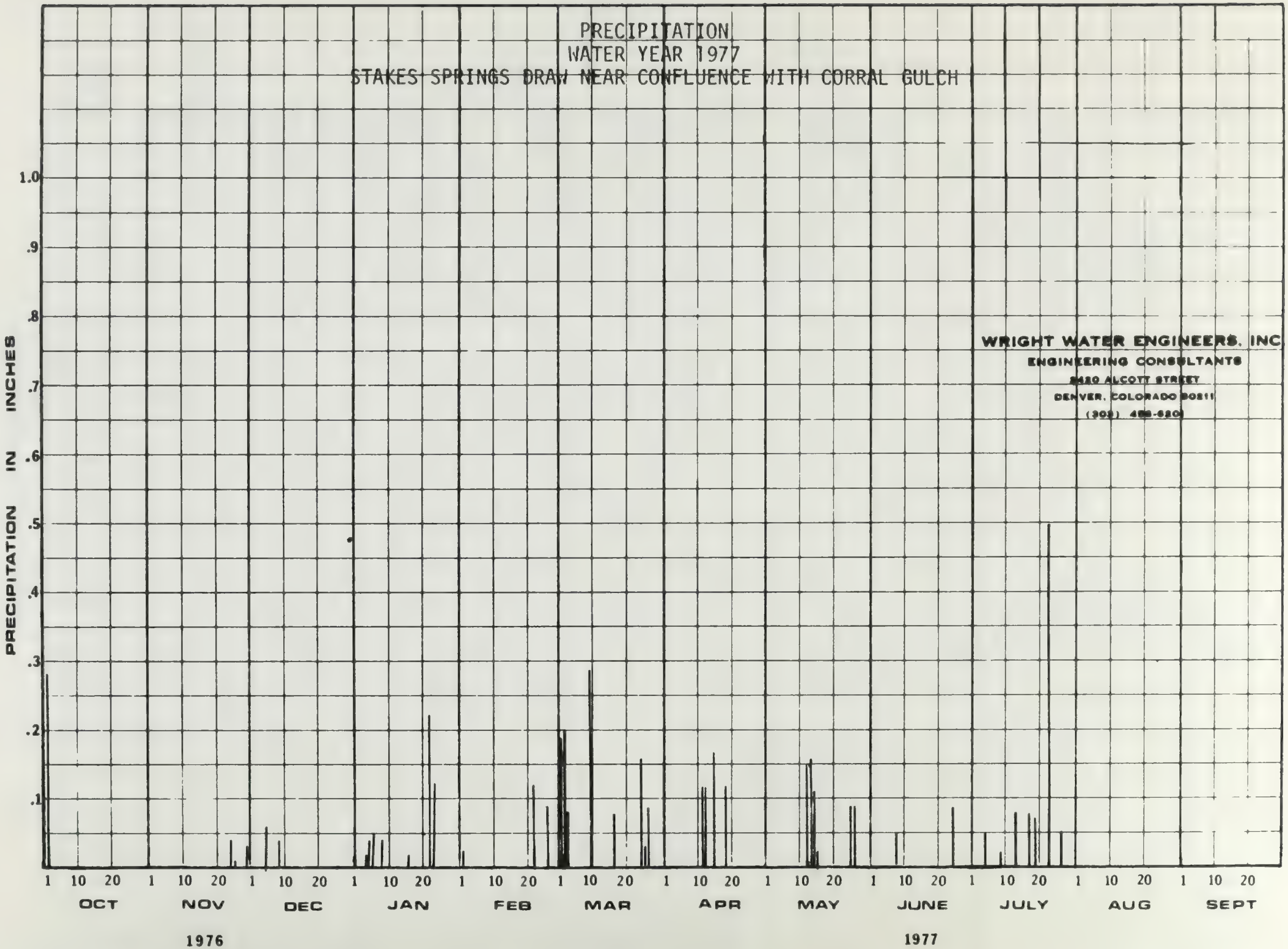



FIGURE 8

PRECIPITATION, WATER YEAR 1977, STAKES SPRINGS DRAW NEAR CONFLUENCE WITH CORRAL GULCH

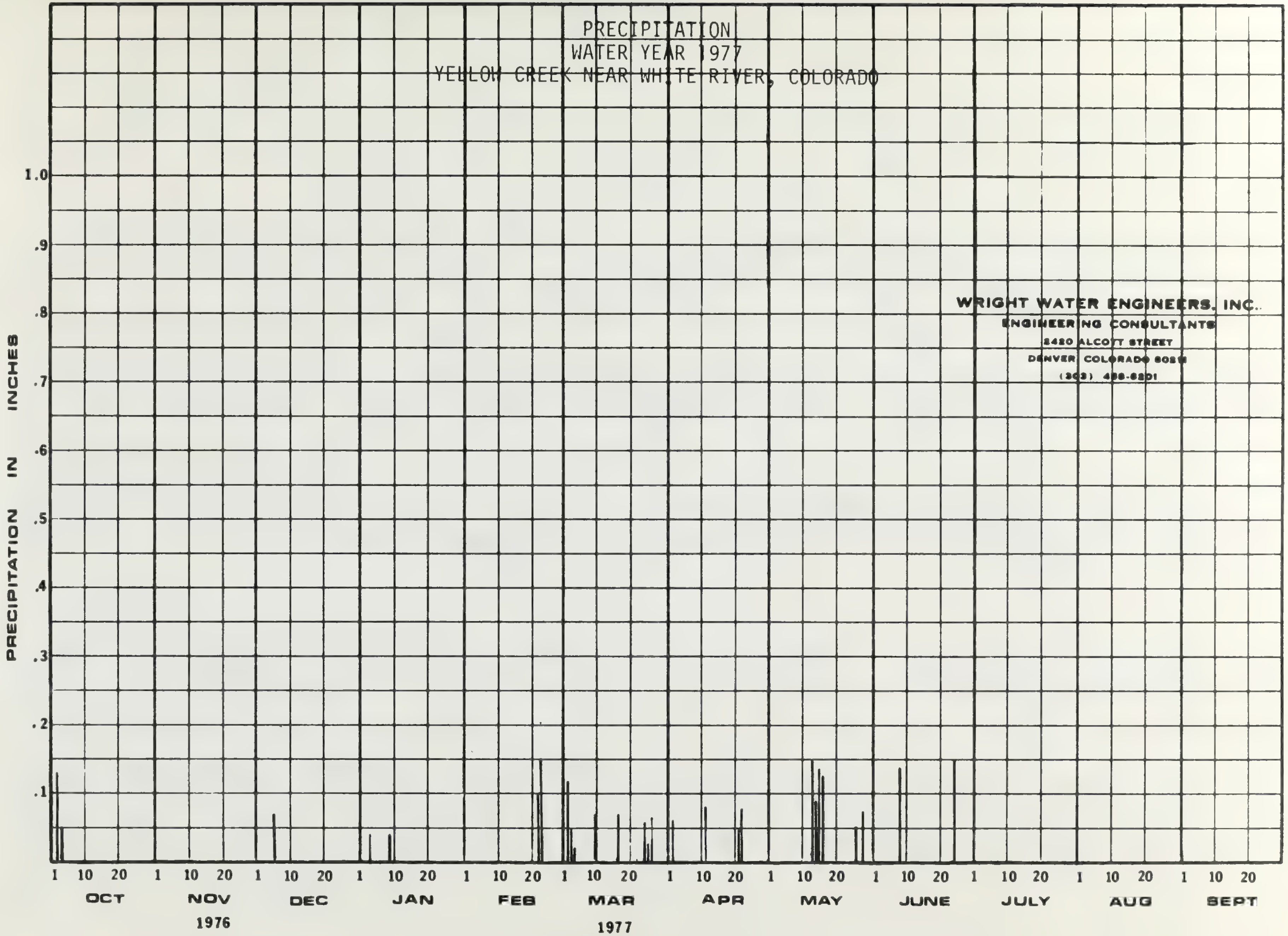



FIGURE 9

PRECIPITATION, WATER YEAR 1977, YELLOW CREEK NEAR WHITE RIVER, COLORADO

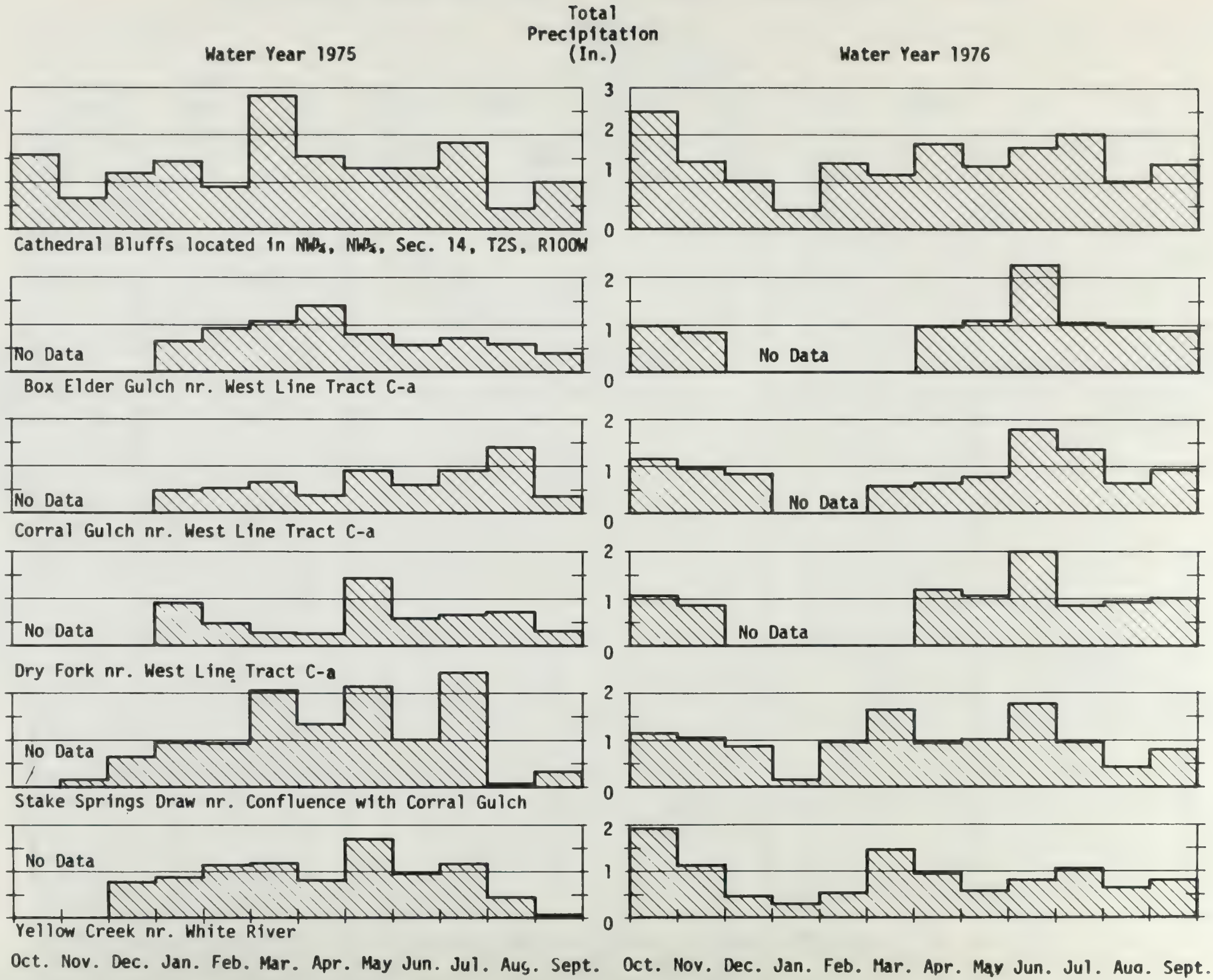



FIGURE 10

TOTAL PRECIPITATION (Inches)

TABLE 2

SUMMARY OF PRECIPITATION DATA FOR WATER YEARS 1975 AND 1976

| Location of Stations | Water Year 1975 Monthly (inches) | | | | | Water Year 1976 Monthly (Inches) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Storage-Type Rain Gage Locations * | Number of Months | Maximum | Minimum | Average | Total | Number of Months | Maximum | Minimum | Average | Total |
| Dry Fork near West Line Tract C-a | 9 | 1.42 | .27 | .62 | 5.61 | 8 | 2.01 | .87 | 1.14 | 9.12 |
| Box Elder Gulch near West Line Tract C-a | 9 | 1.39 | .36 | .77 | 6.92 | 8 | 2.28 | .82 | 1.12 | 8.99 |
| Corral Gulch near West Line Tract C-a | 9 | 1.40 | .35 | .69 | 6.22 | 10 | 1.79 | .58 | .92 | 9.19 |
| Recording-Type Rain Gage Locations | | | | | | | | | | |
| Cathedral Bluffs Located in NW¼, NW¼, Sec. 14, T2S, R100W | 12 | 2.87 | .43 | 1.36 | 16.30 | 12 | 2.49 | .40 | 1.44 | 17.25 |
| Stake Springs Draw near Confluence with Corral Gulch** | 11 | 2.43 | .06 | 1.09 | 12.05 | 12 | 1.79 | .13 | 1.01 | 12.11 |
| Yellow Creek near White River*** | 10 | 1.67 | .04 | .95 | 9.48 | 12 | 1.91 | .29 | .89 | 10.72 |

* Start of Record January 1975, Data Not Collected From Storage Gages During Winter, 1976
** Start of Record November 1974
*** Start of Record December 1974

TABLE 3
COMPARISON OF PRECIPITATION
AT TWO STATIONS
(Inches per month)

| Date | USGS Stake Spring | RBOSP SITE 1 |
|---|---|---|
| February 1977 | 0.23 | 0.11 |
| March 1977 | 1.20 | 0.04 |
| April 1977 | 0.94 | 0.55 |
| May 1977 | 0.62 | 0.19 |
| June 1977 | 0.14 | 0.18 |
| July 1977 | 1.53 | 0.95 |

The two stations were selected for comparison because of their location at opposite ends of the Tract. The results of the data from the two stations indicate that precipitation at the two locations had generally similar high and low patterns except during March.

In summary, precipitation during the second interim program period was lower than average baseline precipitation during March, April, and June. May and July were either near or above the baseline precipitation level, which is usually one inch or more.

In a comparison of two stations on opposite sides of the Tract, similar precipitation patterns occurred.

# CHAPTER 3 - PRECIPITATION CHEMISTRY

## 3.1 OBJECTIVES

In order to determine the chemical makeup of precipitation which falls on and around Tract C-a, a pilot data collection program was initiated during the interim monitoring program. Two samples were collected; one from a snow storm and a second sample from a thundershower precipitation type event during the summer.

## 3.2 METHODS

The method for collecting the samples was dependent upon the type of sample (i.e. rain or snow). The snow sample was collected by gathering freshly fallen snow and putting it in clean containers and allowing it to melt. It should be noted that the containers and all of the equipment used to handle the sample were first cleansed using distilled water. As soon as the snow samples melted, they were poured into special nalgene containers.

The summer thunderstorm rain samples will be collected using the same containers. They will, however, be placed in the field with wooden support structures. The lids will be removed during a thunderstorm event allowing the containers to fill or partially fill with precipitation. If more than one precipitation event is required, the containers will be closed until the next precipitation event occurs. The closed container will be sealed as well as can reasonably be done.

The samples were analyzed using standard wet chemistry and atomic absorption methods for the following constituents:

- arsenic
- cadmium
- chromium
- copper
- lead
- molybdenum
- mercury
- selenium
- bromide
- calcium
- chloride
- magnesium
- potassium
- sodium
- iron
- pH
- fluoride
- sulfate
- total dissolved solids
- bicarbonate
- carbonate
- total nitrogen (nitrate plus nitrite)
- silicon dioxide

## 3.3 RESULTS AND DISCUSSIONS

A snow precipitation sample was collected on March 3, 1977 for chemical analysis. Results of the analysis are summarized in Table 4 and presented in Appendix C.

Constituent concentrations were often below detectable limits. Small amounts of calcium, chloride, nitrate and nitrite, silica, and sulfate were detected.

These constituents can originate from background atmospheric make-up or from air-borne particulate matter. The "Final Environmental Baseline Report for Tract C-a and Vicinity" Book I, page 160.

> "Trace element analysis of high volume filters show that collected particulates consist primarily of silicon, aluminum, magnesium, copper, iron, and calcium. All these materials are currently found in natural ground surface material. Particles in these small size ranges are most easily dislodged by the wind friction along the ground surface."

Other constituents, such as sulfate, nitrate and nitrite, and lead are carried from populated areas by regional wind currents and are readily absorbed by precipitation.

The snow sample chemical analysis is not atypical for a relatively isolated area. No unusual concentrations were found for those constituents analyzed.

TABLE 4

SNOW QUALITY ANALYSIS

CORRAL GULCH EAST OF TRACT C-a

| Parameter | Value |
|---|---|
| Arsenic (ug/l) | 1.00 |
| Bicarbonate (mg/l) | 0.00 |
| Cadmium (ug/l) | 0.00 |
| Calcium (mg/l) | 0.10 |
| Chloride (mg/l) | 0.10 |
| Chromium (ug/l) | 0.00 |
| Conductivity, Spec. (umhos/cm) | 6.40 |
| Copper (ug/l) | 1.00 |
| Fluoride (mg/l) | 0.00 |
| Lead (ug/l) | 2.00 |
| Magnesium (mg/l) | 0.00 |
| Mercury | 0.00 |
| Nitrite plus Nitrate (N) (mg/l) | 0.36 |
| Potassium (mg/l) | 0.00 |
| Selenium (ug/l) | 0.00 |
| Silica (mg/l) | 0.20 |
| Sodium (mg/l) | 0.00 |
| Sulfate (mg/l) | 1.80 |

Arid conditions during the interim period prevented collection of the rain sample. The results of this study will be submitted when they become available.

# SECTION II

# TERRESTRIAL STUDIES

## SECTION II - TERRESTRIAL STUDIES

The two-year terrestrial baseline program provided extensive data on the soils, vegetation, and fauna occurring on and near Tract C-a. During the interim program initiated in November of of 1976, selected terrestrial biota were monitored to provide continuity with the information obtained during baseline studies. Browse condition, range production, mule deer, small mammals, avifauna, and threatened and endangered faunal species were included in the interim studies because these studies would provide data concerning important biota occurring in the Tract C-a area.

The interim terrestrial programs included studies of upland sagebrush, pinyon-juniper, and mixed brush habitats primarily on Tract C-a. To facilitate data comparison, the faunal sampling sites, except for the endangered species studies, were located in the general vicinity of several of the range and browse sampling sites. A description of these intensive sampling locations (Figure 11) follows. Additional range and browse sampling sites were scattered throughout the tract vicinity (Figure 11 ).

(a) Mixed Brush - The mixed brush sampling site was located immediately west of the tract near meteorological Site 1 at an elevation of approximately 7,200 feet (Figure 11). Sampling was concentrated on the north- and east-facing slopes where shrub cover was approximately 50 - 60 percent (RBOSP 1976). The dominant shrub was Utah serviceberry (*Amelanchier utahensis*) which formed large clumps. These clumps of Utah serviceberry were surrounded by scattered herbaceous species (*Stipa comata*, *Poa sandbergii*, and *Eriogonum umbellatum*) that contributed approximately 5 - 10 percent cover. Other shrubs in this vegetation type included sagebursh (*Artemisia tridentata*) and snowberry (*Symphoricarpos oreophilus*).

(b) Pinyon-Juniper - The pinyon-juniper sampling site was located northwest of drill hole G-S 10 at an approximate 6,950 foot elevation. This sampling site was in mature pinyon-juniper on a north-facing slope dominated by pinyon pine (*Pinus edulis*) and Utah juniper (*Juniperus osteosperma*). Tree cover was approximately 21 percent (RBOSP 1976). Shrubs, e.g., sagebrush,

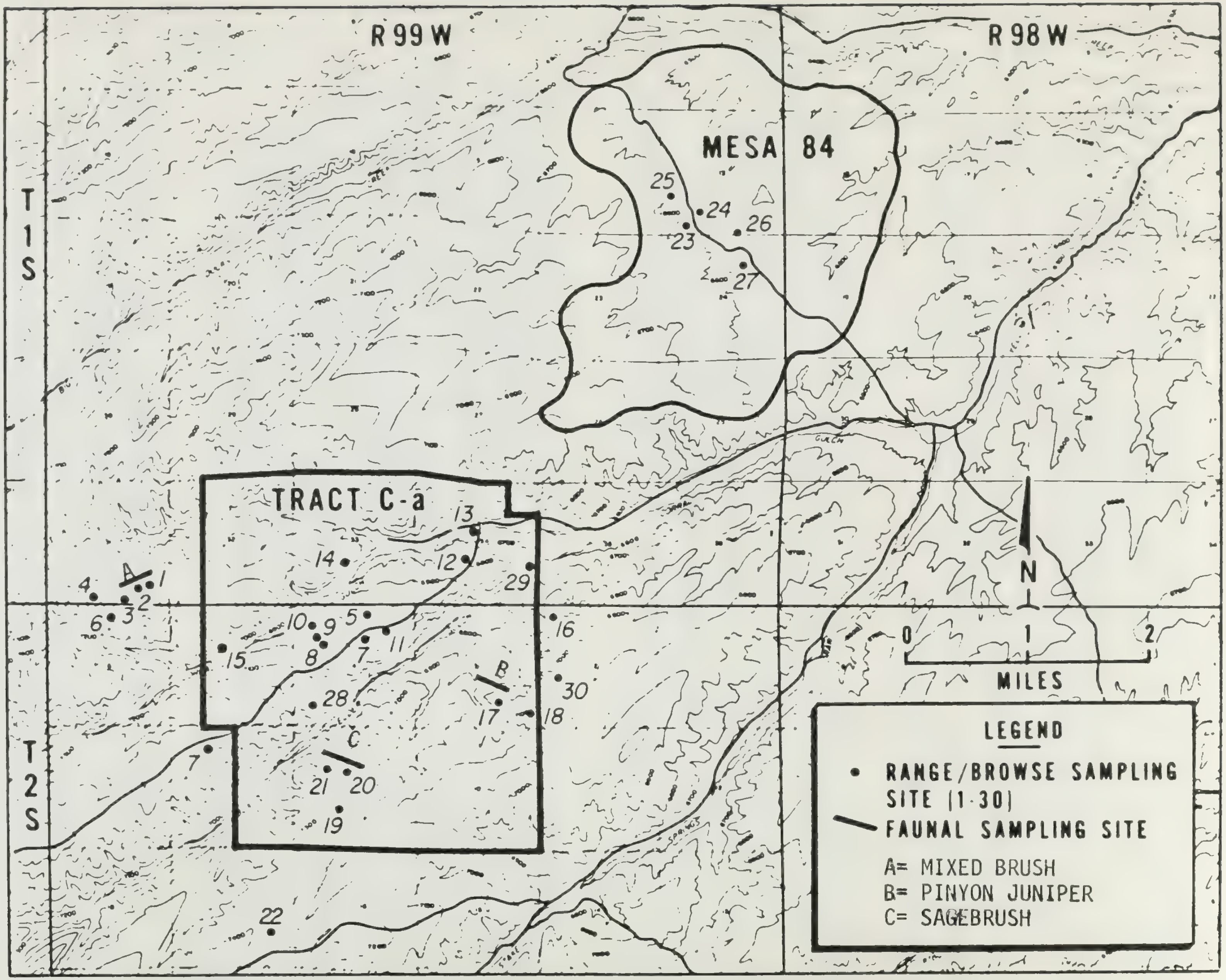



FIGURE 11

SAMPLING SITES OF RANGE/BROWSE AND FAUNAL INTERIM MONITORING STUDIES

bitterbrush (<u>Purshia tridentata</u>), and mountain mahogany (<u>Cercocarpus montanus</u>) provide important forage for fauna in the pinyon-juniper type. These shrubs contributed about 11 percent cover. Total cover of the herbaceous layer varied from 4 - 26 percent depending on the season; the highest herbaceous cover occurred in spring.

(c) Upland Sagebrush - The intensive upland sagebrush site was on a ridgetop southwest of drill hole G-S 13 at about 7,200 feet. The site was on a northwest-facing slope where sagebrush was the dominant plant species. Sagebrush and the less frequent Utah serviceberry and snowberry contributed 30 percent cover (RBOSP 1976). The herbaceous stratum (about 26% cover) was dominated by lupine (<u>Lupinus caudatus</u>), Sandberg bluegrass (<u>Poa sandbergii</u>), and western wheatgrass (<u>Agropyron smithii</u>).

# CHAPTER 1 - RANGE PRODUCTION AND UTILIZATION

## 1.1 <u>OBJECTIVES</u>

Range production and utilization studies were conducted to measure forage production and utilization during the interim period for comparison with estimates obtained during the baseline studies.

## 1.2 <u>METHODS</u>

Range sampling was conducted August 13 - 16. Due to the drought conditions during 1977, not all the herbaceous species could be identified. Grass species were treated as a group; forb species were identified to the lowest taxa possible.

A complete description of the methodology for the range studies was presented in the first RBOSP Semi-Annual Report (1977).

## 1.3 RESULTS AND DISCUSSION

The range production and utilization data obtained during August (Appendix D ) are summarized in Table 5 . The data indicate low production values in the vicinity of Tract C-a.

(a) Mixed Brush - Mixed brush had the highest production (lbs/acre dry weight) of the three vegetation types measured (Table 5 ). Production was approximately equally distributed between forbs and grasses. Slenderleaf collomia (Collomia linearis), phlox (Phlox sp), and goldenweed (Haplopappus nuttallii) were the forbs contributing the greatest biomass. Estimates indicate that forbs were more heavily utilized than grasses in the mixed brush type (65% versus 47%, respectively) and that the overall utilization was 56 percent. Mixed brush was the most heavily utilized of the three vegetation types sampled.

(b) Pinyon-Juniper - Pinyon-juniper had the lowest production of the three vegetation types during 1977. This would be expected since pinyon-juniper had the least herbaceous cover of the three vegetation types sampled during the baseline studies (RBOSP 1977). Grasses contributed the greatest portion (85%) of the production (42 lbs/acre) in this type (Table 5). The most common forb was Hood's phlox (Phlox hoodii). It is doubtful whether Hood's phlox provides any useable forage because it is prickly, but all the present year's growth (1977) existing in August was estimated. Therefore pinyon-juniper production estimates may be higher than what was actually available for forage.

Utilization estimates indicate that grasses were the preferred forage in the pinyon-juniper, although overall utilization was less than that measured in the mixed brush.

(c) Upland Sagebrush - The production in upland sagebrush was only slightly greater than pinyon-juniper production. Grasses contributed approximately 80 percent of the total production (62 lbs/acre) (Table 5 ).

TABLE 5

RANGE PRODUCTION (lbs/acre) AND UTILIZATION (%) ESTIMATES OBTAINED IN AUGUST 1977 ON AND NEAR RBOSP TRACT C-a.

| | Mixed Brush | | Pinyon-Juniper | | Upland Sagebrush | |
|---|---|---|---|---|---|---|
| | Prod. | Util. | Prod. | Util. | Prod. | Util. |
| Antennaria sp | | | .1 | | .1 | |
| Astragalus sp | .8 | | <.1 | | | |
| Chaenactis sp | .2 | | | | | |
| Chenopodium sp | .5 | | | | .9 | |
| Collomia linearis | 13.4 | | | | <.1 | |
| Cryptantha sericea | .1 | | .4 | | .3 | |
| Eriogonum sp | 3.5 | | | | .1 | |
| E. lonahophyllum | | | | | .2 | |
| E. umbellatum | 3.3 | | | | .4 | |
| Erysimum asperum | .1 | | | | | |
| Haplopappus nuttallii | 7.6 | | 1.2 | | .2 | |
| Hedysarum boreale | 1.8 | | | | | |
| Hymenoxys acaulis | 6.8 | | | | <.1 | |
| Ipomopsis aggregata | .2 | | <.1 | | .1 | |
| Linum lewisii | .9 | | | | | |
| Lithospermum ruderale | .6 | | | | | |
| Penstemon sp | .3 | | .1 | | .3 | |
| Phlox sp | 9.1 | | .2 | | .3 | |
| P. hoodii | | | 2.9 | | 5.8 | |
| Physaria floribunda | .5 | | <.1 | | .1 | |
| Senecio multilobatus | .2 | | <.1 | | .1 | |
| Sisymbrium linifolium | | | | | .2 | |
| Sphaeralcea coccinea | .7 | | .1 | | 2.3 | |
| Taraxacum officinale | <.1 | | | | | |
| Unknown Legume | 7.6 | | .2 | | .1 | |
| Other Forbs | 3.1 | | .8 | | 1.5 | |
| Total Forbs | 61.2 | 65 | 6.1 | 31 | 12.9 | 23 |
| | (22.6)* | | (5.9) | | (11.8) | |
| Total Grass | 71.6 | 47 | 35.6 | 50 | 49.1 | 58 |
| | (43.9) | | (17.8) | | 35.3 | |
| TOTAL | 132.8 | 56 | 41.7 | 41 | 62.0 | 41 |

* Numbers in parentheses are standard deviation(s).

Hoods phlox had the highest biomass (5.8 lbs/acre) of the forbs sampled but probably provided little palatable forage. (See pinyon-juniper discussion above.) Data indicate that grasses were more heavily utilized (58%) than forbs (23%). The overall utilization (41%) was the same as utilization in the pinyon-juniper type.

(d) Comparison Between Baseline and Interim Studies - The data suggest much lower production in 1977 than in 1975 (Table 6). The decrease was greatest for upland sagebrush (approximately 77%) but the decreases for pinyon-juniper (58%) and mixed brush (36%) were substantial. The decreased 1977 production is probably related to drought conditions in 1977.

TABLE 6

COMPARISON OF RANGE PRODUCTION AND UTILIZATION ESTIMATES OBTAINED IN 1975 AND 1977 ON AND NEAR TRACT C-a

| | SCS Expectations[1] lbs/acre | Production (dry weight lbs/acre) | | Utilization (%) | |
|---|---|---|---|---|---|
| | | 1975 | 1977 | 1975 | 1977 |
| Mixed Brush | 500-1800 | 207 | 133 | 38 | 56 |
| Pinyon-juniper | 400-800 | 101 | 42 | 32 | 41 |
| Upland Sagebrush | 600-1200 | 269 | 62 | 8 | 41 |

[1]USDA (1975)

The apparent decrease in production was accompanied by increased forage utilization estimates. The increase in utilization was greatest for sagebrush (8% to 41%), but pinyon-juniper and mixed brush also showed substantial increased utilizations (32% to 41% and 38% to 56%, respectively) (Table 6). Any relationship between the increased utilization in 1977 and 1977 stocking rates for cattle cannot be determined at this time because the necessary stocking rate information is not yet available from BLM.

The production estimates for 1977 appeared to be atypical and a result of the environmental conditions during the 1977 growing season. Although the 1977 measurements are closer to the baseline production values than to SCS expectations (Table 6), conclusions are not possible at this time regarding the general range condition and carrying capacity of Tract C-a. Data representative of normal or average conditions are necessary before an evaluation of the carrying capacity of Tract C-a can be made.

# CHAPTER 2 - BROWSE CONDITION AND UTILIZATION

## 2.1 OBJECTIVES

Browse condition and utilization studies were conducted to determine the condition of important browse species and the degree to which wildlife is currently using these plant species.

## 2.2 METHODS

Browse condition and utilization studies were conducted December 6 - 8, 1976, May 5 - 7, 1977, and August 13 - 16, 1977. A detailed description of the browse sampling methods was presented in the first RBOSP Semi-Annual Report (1977).

## 2.3 RESULTS AND DISCUSSIONS

The results of the December browse sampling were presented in the first RBOSP Semi-Annual Report (1977) and will not be repeated here except for comparative purposes. The data obtained during May (Appendix E)and August (Appendix F) of 1977 are summarized in Tables 7 and 8, respectively, by form class, age class, hedging class, and availability. Since the form class, age class, hedging class, and availability does not significanly change between seasons, see the first RBOSP Semi-Annual Report (1977) for a discussion of these characteristics. A comparison of browse utilization between the baseline and interim monitoring sampling periods is presented in Table 9.

TABLE 7

CONDITION OF IMPORTANT BROWSE SPECIES SAMPLED IN THREE VEGETATION TYPES ON AND NEAR RBOSP OIL SHALE TRACT C-a DURING MAY 1977.

| Habitat Type | Species | Number Plants Sampled | Average % Util. | Average % Avail. | Form Class Percentages | | | | | | | | Age Class | | | | Hedging Class | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Seedling | Young | Mature | Deca-dent | Light | Moderate | Severe |
| MB | Serviceberry | 50 | 22 | 89 | 26 | 30 | 30 | 2 | 4 | 6 | | 2 | | 10 | 78 | 12 | 33 | 30 | 37 |
| | Sagebrush | 40 | 7 | 84 | 35 | 38 | 5 | 8 | 7 | 2 | | 5 | | 7 | 70 | 23 | 45 | 45 | 10 |
| | Snowberry | 21 | 13 | 94 | 33 | 47 | 10 | | 5 | 5 | | | | 14 | 76 | 10 | 36 | 50 | 14 |
| | Mountain Mahogany | 10 | 42 | 93 | | 50 | 40 | | 10 | | | | | | 90 | 10 | | 60 | 40 |
| | Pinyon Pine | 4 | 4 | 83 | 25 | 50 | | 25 | | | | | | | 75 | 25 | 50 | 50 | |
| PJ | Pinyon Pine | 49 | 16 | 69 | 29 | 14 | 12 | 21 | 12 | 2 | 8 | 2 | 12 | 8 | 78 | 2 | 52 | 33 | 15 |
| | Juniper | 37 | 1 | 38 | 11 | 5 | 8 | 38 | 16 | | 8 | 14 | | | 76 | 24 | 62 | 28 | 10 |
| | Sagebrush | 108 | 10 | 77 | 19 | 16 | 16 | 9 | 11 | 19 | | 10 | 1 | 2 | 53 | 54 | 30 | 31 | 40 |
| | Snowberry | 5 | 67 | 79 | | 20 | 60 | | | 20 | | | | | 60 | 40 | | 20 | 80 |
| | Bitterbrush | 33 | 68 | 73 | 3 | 34 | 27 | | 12 | 12 | | 12 | | | 67 | 33 | 3 | 55 | 41 |
| | Mountain Mahogany | 17 | 83 | 81 | | | 41 | | 12 | 41 | | 6 | | | 82 | 18 | | 13 | 87 |
| | Serviceberry | 1 | 60 | 80 | | | | | | 100 | | | | | 100 | | | | 100 |
| SB | Sagebrush | 360 | 6 | 71 | 23 | 17 | 8 | 7 | 10 | 18 | <1 | 17 | | <1 | 58 | 42 | 43 | 29 | 28 |
| | Serviceberry | 8 | 10 | 75 | 63 | 25 | | | | | | 17 | 12 | 12 | 63 | 13 | 87 | 13 | |
| | Snowberry | 5 | 10 | 28 | | | 20 | 20 | 60 | | | | | | 20 | 80 | 20 | 60 | 20 |
| | Pinyon Pine | 2 | 0 | 100 | 50 | 50 | | | | | | | | | 100 | | 50 | 50 | |

MB = Mixed Brush
PJ = Pinyon-juniper
SB = Upland Sagebrush

Form Classes

1 All available, little or no hedging
2 All available, moderatley hedged
3 All available, severely hedged
4 Partially available, little or no hedging
5 Partially available, moderately hedged
6 Partially available, severely hedged
7 Unavailable
8 Dead

TABLE 8

CONDITION OF IMPORTANT BROWSE SPECIES SAMPLED IN THREE VEGETATION TYPES ON AND NEAR RBOSP OIL SHALE TRACT C-a DURING AUGUST 1977.

| Habitat Type | Species | Number Plants Sampled | Average % Util. | Average % Avail. | Form Class Percentages | | | | | | | | Age Class | | | | Hedging Class | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | Seedling | Young | Mature | Decadent | Light | Moderate | Severe |
| MB | Serviceberry | 50 | 7 | 90 | 26 | 30 | 30 | 2 | 4 | 6 | | 2 | | 10 | 78 | 12 | 33 | 30 | 37 |
| | Sagebrush | 40 | 4 | 84 | 35 | 38 | 5 | 7 | 7 | 3 | | 5 | | 7 | 70 | 23 | 45 | 45 | 10 |
| | Snowberry | 21 | 6 | 94 | 33 | 47 | 10 | | 5 | 5 | | | | 14 | 76 | 10 | 36 | 50 | 14 |
| | Mountain Mahogany | 10 | 18 | 93 | | 50 | 40 | | 10 | | | | | | 90 | 10 | | 60 | 40 |
| | Pinyon Pine | 4 | 4 | 82 | 25 | 50 | | 25 | | | | | | | 100 | | 50 | 50 | |
| PJ | Pinyon Pine | 49 | 1 | 69 | 29 | 14 | 12 | 21 | 12 | 2 | 8 | 2 | 12 | 8 | 78 | 2 | 52 | 33 | 15 |
| | Juniper | 37 | 7 | 38 | 11 | 5 | 8 | 38 | 16 | | 8 | 14 | | | 81 | 19 | 59 | 31 | 10 |
| | Sagebrush | 108 | 6 | 77 | 18 | 16 | 16 | 8 | 10 | 17 | | 15 | 1 | 2 | 53 | 44 | 30 | 31 | 40 |
| | Snowberry | 5 | 6 | 79 | | 20 | 60 | | | 20 | | | | | 60 | 40 | | 20 | 80 |
| | Bitterbrush | 33 | 5 | 70 | 3 | 31 | 27 | | 12 | 12 | | 15 | | | 64 | 36 | 3 | 55 | 41 |
| | Mountain Mahogany | 17 | 8 | 74 | | | 41 | | 12 | 41 | | 6 | | | 82 | 17 | | 13 | 87 |
| | Serviceberry | 1 | 10 | 80 | | | 100 | | | | | | | | 100 | | | | 100 |
| SB | Sagebrush | 360 | 2 | 70 | 23 | 17 | 8 | 7 | 10 | 17 | <1 | 18 | | <1 | 56 | 44 | 43 | 29 | 28 |
| | Serviceberry | 8 | 1 | 75 | 62 | 25 | | | | | | 13 | 12 | 12 | 63 | 13 | 87 | 13 | |
| | Snowberry | 5 | 0 | 28 | | | 20 | 20 | 60 | | | | | | 20 | 80 | 20 | 60 | 20 |
| | Pinyon Pine | 2 | 0 | 100 | 50 | 50 | | | | | | | | | 100 | | 50 | 50 | |

MB = Mixed Brush
PJ = Pinyon-juniper
SB = Upland Sagebrush

Form Classes

1 All available, little or no hedging
2 All available, moderately hedged
3 All available, severely hedged
4 Partially available, little or no hedging
5 Partially available, moderately hedged
6 Partially available, severely hedged
7 Unavailable
8 Dead

TABLE 9

COMPARISON OF AVERAGE UTILIZATION(% UTILIZATION) IN THREE VEGETATION TYPES BETWEEN THE BASELINE AND INTERIM SAMPLING PERIODS ON AND NEAR TRACT C-a

| | April 1976 | Dec. 1976 | May 1977 | Aug. 1977 |
|---|---|---|---|---|
| Mixed Brush | 12 | 12 | 17 | 7 |
| Pinyon-Juniper | 27 | 20 | 24 | 5 |
| Upland Sagebrush | | 10 | 6 | 2 |

(a) Mixed Brush - In the mixed brush habitat the most frequently encountered shrubs were serviceberry and sagebrush but mountain mahogany and serviceberry had the greatest percent utilization for each of the two sampling periods. (Tables 7 and 8). Based on deer use, it appears that mountain mahogany and serviceberry are the preferred browse species in the mixed brush habitat, because 35 - 40 percent of these two shrubs are severely hedged (Table 7). This level of hedging suggests that the mixed brush browse condition is poor (Cole 1963). The average utilization (7 - 17%) for the four sampling periods (Table 8 ) indicates that deer use in this habitat type is within the "allowable use" for mild winters (less than 25% utilization) (Cole 1963).

The greatest utilization was recorded in May which suggests that the mixed brush was utilized for browse more often during December through April than the summer months. Baseline studies indicate that deer migrate through the area during fall and spring (RBOSP 1977); deer use during fall migration would be represented by December estimates; winter and spring migration use is indicated by May estimates.

The percent utilization estimates from spring of 1976 and 1977 are generally comparable (Table 9) even though the sample sizes differed (baseline = 46; interim = 5).

(b) Pinyon-Juniper - In the pinyon-juniper vegetation type, sagebrush was the most common shrub and bitterbrush, mountain mahogany, snowberry, and serviceberry (in decreasing order) were less common. Bitterbrush and

mountain mahogany were more heavily utilized (68 and 83%, respectively) (Table 7 ) than the other shrub species sampled in May. There was little difference in utilization amoung the seven species when sampled in August (Table 8 ) and utilization was generally less than that estimated in May. The average utilization of shrubs sampled in pinyon-juniper is generally higher than the mixed brush or sagebrush types (Table 8 ) particularly during non-summer months. This may be related to the fact that pinyon-juniper provides shelter for large herbivores during inclement weather.

The most heavily utilized shrub species have 40 - 100 percent of their individuals in the severe hedging class (Table 8) which classifies the condition of the pinyon-juniper type as poor to very poor (Cole 1963). This conclusion may be misleading since it is based on a small sample size (1-33 individuals/plant species) but the high utilization (60 - 83%) exceeded the 50 percent utilization indicated as acceptable for average conditions (Cole 1963). Mountain mahogany (which the utilization data suggests is the preferred species on tract) exceeded even the 75 percent limit suggested for severe conditions.

Utilization estimated in each spring during the baseline and interim studies are comparable (Table 9 ). This was expected since weather conditions during these two winters (1975 - 1976 and 1976 - 1977) were generally similar i.e., mild conditions. Only qualitative comparisons can be made due to large differences in sample size (baseline = 53; interim = 10).

(c) Upland Sagebrush - The sagebrush habitat is dominated by sagebrush (Tables 7 and 8 ). The minimum utilization estimated during each of the three sampling periods indicates that the sagebrush type is a less important source of browse for large herbivores on Tract C-a during mild winters than the other two vegetation types. The sagebrush type was in good to excellent condition (Cole 1963) and considerably below the "allowable use". This condition probably results from the presence of plant species which are not preferred by large herbivores.

(d) Distribution of Browse Utilization - The total percent utilization (sum of percent utilization of each of the 25 shrubs) for each transect within

a vegetation type was ranked (high to low) for each sampling period (Table 10). Several transects ranked consistently high or low, regardless of the range in percent utilization for the sampling period (e.g., Pinyon-Juniper: Transects 17, 22 - high; Transect 7 - low. Utilization was high in pinyon-juniper habitat on Airplane Ridge (Transect 12) and Wolf Ridge (Transect 17); mixed brush on the south exposure (Transect 6); and sagebrush adjacent to pinyon-juniper (Transect 21). Feral horses were observed foraging in the vicinity of Transect 30 which also had a relatively high percent utilization. A consistent pattern between seasons in the rankings of transects may suggest sites preferred or avoided by large herbivores. This type of information periodically monitored over several years may provide a basis for determining local trends of large herbivore distribution on and near Tract C-a. Twenty-three of the interim transects will be monitored during the Modular Development Phase (MDP). This may provide a basis for later comparisons of large herbivore distributions on tract a MDP activities progress.

Further discussion regarding the relationship of browse utilization and large herbivores, particularly mule deer, is presented in the following chapter.

# CHAPTER 3 - MULE DEER

## 3.1 OBJECTIVES

The objective of the mule deer program during the RBOSP monitoring period was to collect information which would provide a comparison with the baseline studies.

## 3.2 METHODS

The spring 1977 deer pellet group count was conducted on May 9 to 11. New groups were marked by placing a white marble chip in the center of each group. The fall deer pellet group count was conducted August 30, 1977. New groups were painted yellow and yellow painted stones were placed in each group.

TABLE 10

RANK OF EACH BROWSE UTILIZATION TRANSECT BASED ON TOTAL UTILIZATION WITHIN EACH VEGETATION TYPE FOR EACH SAMPLING PERIOD ON AND NEAR TRACT C-a.

| | December 1976* | May 1977* | August 1977* |
|---|---|---|---|
| | Transect No. (% Util.) | Transect No. (% Util.) | Transect No. (% Util.) |
| Mixed Brush | 6 (660) | 6 (785) | 4 (250) |
| | 3 (217) | 1 (437) | 6 (230) |
| | 1 (136) | 2 (352) | 1 (155) |
| | 2 (117) | 3 (270) | 3 (105) |
| | 4 (48) | 4 (230) | 2 (100) |
| Pinyon-Juniper | 17 (1048) | 11 (1080) | 17 (460) |
| | 18 (930) | 17 (1060) | 12 (320) |
| | 12 (870) | 18 (1050) | 19 (160) |
| | 11 (699) | 12 (950) | 18 (85) |
| | 5 (219) | 16 (610) | 11 (75) |
| | 25 (215) | 5 (372) | 16 (65) |
| | 23 (207) | 19 (315) | 5 (50) |
| | 16 (200) | 23 (205) | 23 (20) |
| | 19 (196) | 7 (170) | 25 (15) |
| | 7 (121) | 25 (115) | 7 (10) |
| Upland Sagebrush | 21 (835) | 21 (725) | 30 (315) |
| | 20 (503) | 30 (545) | 22 (100) |
| | 29 (475) | 29 (240) | 26 (75) |
| | 30 (370) | 22 (220) | 20 (45) |
| | 27 (257) | 8 (130) | 29 (35) |
| | 24 (200) | 26 (90) | 21 (30) |
| | 26 (195) | 20 (90) | 9 (30) |
| | 22 (127) | 27 (70) | 27 (20) |
| | 8 (82) | 24 (60) | 8 (15) |
| | 28 (47) | 15 (60) | 24 (10) |
| | 9 (20) | 9 (60) | 10 (9) |
| | 10 (9) | 28 (25) | 28 (0) |
| | 15 (2) | 13 (15) | 15 (0) |
| | 13 (0) | 10 (9) | 13 (0) |
| | 14 (0) | 14 (0) | 14 (0) |

*Sum of present utilization for 25 shrubs sampled along a transect.

A complete description of the methods used in the mule deer studies was presented in the first RBOSP Semi-Annual Report (1977).

## 3.3 RESULTS AND DISCUSSION

During the spring sampling period, three new mule deer pellet groups were found in upland sagebrush, six in mixed brush, and none were found in pinyon-juniper (Appendix G).

During the fall sampling, two new groups were found in pinyon-juniper and no new groups were found in other vegetation types (Appendix H).

Deer density from interim data is expressed as an estimated number of deer per day, per unit area. This number is derived by enumerating the groups accumulated during the sample period in the sampled (plot) area and extrapolating that number to any desired unit of measurement (acre, square mile). This number is divided by the number of days in the accumulation period times the average number of pellet groups deposited by a deer in one day to obtain an estimate of the number of deer per unit area (Neff 1968). Computations are as follows.

### Upland Sagebrush - Spring 1977

Three new groups deposited in a total area of 100 $m^2$ or 300 groups/hectare; accumulation period from December 3 to May 11 or 159 days; 13.2 groups deposited per deer per day (Neff 1968).

$$\frac{300 \text{ groups/hectare}}{159 \text{ days} \times 13.2 \text{ groups/deer/day}} =$$

.143 deer/hectare
14.3 deer/square kilometer
37 deer/square mile

### Mixed Brush - Spring, 1977

$$\frac{600 \text{ groups/hectare}}{157 \text{ days} \times 13.2 \text{ groups/deer/day}} =$$

.290 deer/hectare
29 deer/square kilometer
75.1 deer/square mile

Pinyon-Juniper - Fall, 1977

$$\frac{200 \text{ groups/hectare}}{111 \text{ days} \times 13.2 \text{ groups/deer/day}} =$$

.137 deer/hectare
13 deer/square kilometer
35.4 deer/square mile

In addition to deer density estimates, evidence of deer use of the Tract C-a study area is also indicated by browse utilization studies (Table 11). Browse utilization by mule deer is only an indication that deer were in a particular vegetation type and fed upon certain plant species; it does not indicate the number of deer in any particular of habitat. The highest browse utilization was measured in the pinyon-juniper vegetation type during the winter; mixed brush is probably more important during early spring when deer are migrating toward higher elevations west of Tract C-a. Mule deer studies during the two-year baseline studies (RBOSP 1977) indicated that Tract C-a provides transitional range for mule deer during fall and spring migrations and mild winters. Low deer numbers were observed in the summer during baseline studies (RBOSP 1977). The browse utilization recorded during August 1977 may be partially attributed to feral horses.

Additional browse information is presented in Chapter 2 of this section.

TABLE 11
A COMPARISON OF ESTIMATED MULE DEER DENSITY (number of individuals/square mile) AND BROWSE UTILIZATION (%) IN MIXED BRUSH, PINYON-JUNIPER, AND AND UPLAND SAGEBRUSH.

| | Dec. 1976 | May 1977 | | Aug. 1977 | |
|---|---|---|---|---|---|
| | Util. (%) | Util.(%) | Deer Density | Util.(%) | Deer Density |
| Mixed Brush | 12 | 17 | 75 | 7 | 0 |
| Pinyon-Juniper | 20 | 24 | 0 | 5 | 35 |
| Upland Sagebrush | 10 | 6 | 37 | 2 | 0 |

Deer density estimates during the baseline studies (RBOSP 1977) were expressed as a pellet group index derived by dividing the accumulated pellet groups per

acre by the number of days in the accumulation period. Results from the interim monitoring program may be expressed in similar terms.

Data on mule deer pellet groups were collected in all vegetation types during baseline studies. Data collected during the interim monitoring period were from individual vegetation types. Interim monitoring data for all vegetation types were combined for the following comparison of baseline and interim monitoring data.

| | Sample Period | | | | |
|---|---|---|---|---|---|
| | Summer 1975 | Winter 1975-76 | Summer 1976 | Winter 1976-77 | Summer 1977 |
| Deer Pellet Group Index | .44 | .52 | .43 | .77 | .24 |

The winter deer pellet group index for 1976 - 1977 was higher than that for 1975 - 1976; this may be related to the mild 1976 - 1977 winter. Precipitation recorded at Site 1 (based on tipping bucket measurements) during winter 1976 - 1977 (November through March) was 0.21 inch as compared to 1.08 inch during the same period in the previous year (RBOSP 1977). Snow depth maximum during this period was 2.5 inches in 1976 - 1977 (snow depth only measured until January 29, 1977) as compared to 8.0 inches in winter 1975 - 1976 (RBOSP 1977). The reduced snow depth during the winter 1976 - 1977 may have extended the length of deer use of Tract C-a as indicated in the comparison of baseline and interim deer pellet group data.

Due to the small sample size in both baseline and interim studies, conclusive evidence cannot be generated to explain any apparent differences between seasons, between years, or among vegetation types. More detailed statistical comparisons are not possible.

# CHAPTER 4 - SMALL MAMMALS

## 4.1 OBJECTIVES

The objectives of this program were to detect changes from established baseline community composition and relative abundance of Tract C-a small mammal populations.

## 4.2 METHODS

Small mammal live trapping was conducted during May 7 - 11, 1977. A detailed description of the small mammal trapping methods was presented in the first RBOSP Semi-Annual Report (1977).

## 4.3 RESULTS AND DISCUSSION

The small mammal data obtained during May (Appendix I) are summarized in Table 12 . Data were summarized for nocturnal activity, diurnal activity, and the entire 24-hour trapping periods. Relative abundance estimates were based on the total number of captures per 100 station (i.e., three traps per trap station)-periods (i.e., night, day and 24-hour). Trapping success was such that multiple captures at the same station occured on only on three occasions in the pinyon-juniper area and one occasion in the upland sagebrush vegetation type. Two individuals were captured at the same station at the same time at these stations. For this reason the use of station periods only slightly inflates the relative abundance estimates. The values in the 24-hour data summaries may also be slightly inflated because some individuals had the potential to be captured twice in one 24-hour period; this occurred four times in the pinyon-juniper area and one time in the upland sagebrush area.

Direct comparisons of small mammal trapping results cannot be made between baseline and interim monitoring studies because:

- Areas sampled in May 1977 were not the same as areas sampled in May 1975 - 1976. The same habitat types were sampled, but there were probably differences in the vegetative structure of the two areas which could account for some of the differences in trapping results.

TABLE 12

SMALL MAMMAL TRAPPING SUMMARY BY SPECIES FOR
INTERIM MONITORING, MAY 1977 RBOSP TRACT C-a.

| | Number of total captures of each species per 100 station periods | | | | | |
|---|---|---|---|---|---|---|
| | SPLA* | EUMI | EUQU | PEMA | LACY | TOTAL |
| Pinyon-Juniper - night period | 0.8 | 2.5 | 6.7 | 1.7 | 0.0 | 11.7 |
| Mixed Brush - night period | 0.0 | 0.8 | 0.0 | 1.7 | 0.8 | 13.3 |
| Upland Sagebrush - night period | 0.0 | 2.5 | 0.0 | 9.2 | 0.0 | 11.7 |
| Pinyon-Juniper - day period | 0.0 | 7.5 | 10.8 | 0.0 | 0.0 | 18.3 |
| Mixed Brush - day period | 0.0 | 14.2 | 0.0 | 0.0 | 0.0 | 5.8 |
| Upland Sagebrush - day period | 0.0 | 5.8 | 0.0 | 0.0 | 0.0 | 14.2 |
| Pinyon-Juniper - 24-hour period | 0.8 | 10.0 | 17.5 | 1.7 | 0.0 | 30.0 |
| Mixed Brush - 24-hour period | 0.0 | 15.0 | 0.0 | 1.7 | 0.8 | 17.5 |
| Upland Sagebrush - 24-hour period | 0.0 | 8.3 | 0.0 | 9.2 | 0.0 | 17.5 |

* SPLA - *Spermophilus lateralis* - Golden mantled ground squirrel
EUMI - *Eutamias minimus* - Least chipmunk
EUQU - *Eutamias quadrivittatus* - Colorado chipmunk
PEMA - *Peromyscus maniculatus* - Deer mouse
LACY - *Lagurus curtatus* - Sagebrush vole

- Trapping methods were different in baseline and interim monitoring surveys. Direct comparisons of grid trapping, which was used during baseline studies, and line trapping, which was used during interim monitoring studies, would not be meaningful.

General comparisons will be made between baseline and interim studies regarding species composition, relative abundance, and species dominance of small mammals in each vegetation type sampled.

Small mammals captured in the spring of 1977 included deer mouse, least chipmunk, Colorado chipmunk, golden mantled ground squirrel, and sagebrush vole (Table 12 ). Also, cottontail (Sylvilagus spp) and white-tailed prairie dog (Cynomys leucurus) were observed and sign of the bushy-tailed woodrat (Neotoma cinerea) was found.on Tract C-a.

(a) Mixed Brush - Least chipmunks were the most abundant small mammal captured in the mixed brush vegetation type during baseline studies (RBOSP 1977) and during interim monitoring studies (Table 13 ). Deer mice were the second most abundant mammal in this habitat type in the three sampling periods. One sagebrush vole was also captured. Least chipmunks were captured more often than deer mice by a ratio of approximately 3:1 in 1975, 9:4 in 1976, and 7:1 in 1977. The dominance of least chipmunks over deer mice has thus been apparent during the three survey periods. The greater number of least chipmunks as compared to deer mice captured in 1977 may be caused by the differences in trapping methods. However, both species appeared to be less abundant in 1977 than 1975 or 1976.

(b) Pinyon-Juniper - Deer mice were the most abundant small mammal captured in the pinyon-juniper vegetation type during baseline studies (RBOSP 1977) (Table 14 ). Least chipmunks were second in abundance. Deer mice were captured more often than least chipmunks by a ratio of 3:2 in 1975 and 6:1 in 1976. Deer mice appeared to have increased from 1975 to 1976. Deer mice and least chipmunks constituted about 81 percent of the total captures in 1975-1976 sampling period. Colorado chipmunks were the most abundant small mammal captured during interim monitoring studies (Table 14 ). Least chipmunks were the

## TABLE 13

## COMPARISON OF SMALL MAMMAL TRAPPING RESULTS IN THE MIXED BRUSH VEGETATION TYPE MAY 1975, 1976, AND 1977, FOR RBOSP[a]

| Species | Grid 5[b] 1975 Total Captures[c] | Grid 5[b] 1975 Captures/ 100 Trap Nights | Grid 5[b] 1976 Total Captures[c] | Grid 5[b] 1976 Captures/ 100 Trap Nights | 1977[d] Total Captures | 1977[d] Captures/ 100 Trap Nights | Av. Captures[e]/ 100 Trap Nights |
|---|---|---|---|---|---|---|---|
| Eutamias minimus (Least chipmunk) | 53 | 27 | 52 | 27 | 18 | 15 | 23.0 |
| Peromyscus maniculatus (Deer mouse) | 19 | 10 | 23 | 12 | 2 | 2 | 8.0 |
| Lagurus curtatus (Sagebrush vole) | — | — | — | — | 1 | 1 | .3 |
| Total | 72 | 37 | 75 | 39 | 21 | 18 | 31.3 |

a. These are not direct comparisons. Results are presented in this way to give a general comparison of results based on species composition and general abundance estimates. See text for discussion of results.
b. Grid 2, Table 3.14; Terrestrial Annual Report (1977). Based on total captures and 195 total trap nights.
c. Grid D, Table 3.14; Terrestrial Annual Report (1977). Based on total captures and 845 total trap nights.
d. 1977 Interim Monitoring Results. Based on 120 total trap nights.
e. Based on three year average.

## TABLE 14

### COMPARISON OF SMALL MAMMAL TRAPPING RESULTS IN THE PINYON-JUNIPER VEGETATION TYPE - MAY 1975, 1976, AND 1977, FOR RBOSP[a]

| Species | Grid C[b] 1975 | | Grid C[b] 1976 | | 1977[d] | | |
|---|---|---|---|---|---|---|---|
| | Total Captures[c] | Captures/ 100 Trap Nights | Total Captures[c] | Captures/ 100 Trap Nights | Total Captures | Captures/ 100 Trap Nights | Av. Captures[e]/ 100 Trap Nights |
| Eutamias minimus (Least chipmunk) | 35 | 4 | 17 | 2 | 12 | 10 | 5.3 |
| Peromyscus maniculatus (Deer mouse) | 53 | 6 | 97 | 12 | 2 | 2 | 6.6 |
| Eutamias quadrivittatus (Colorado chipmunk) | 10 | 1 | 6 | 1 | 21 | 18 | 6.6 |
| Spermophilus lateralis (Golden-mantled ground squirrel) | 12 | 1 | 10 | 1 | 1 | 1 | 1.0 |
| Peromyscus truei (Pinyon mouse) | 4 | 1 | | | | | .3 |
| Perognathus apache (Apache pocket mouse) | — | — | 3 | <1 | — | — | <1 |
| Total | 114 | 13 | 133 | 16 | 36 | 31 | 19.8 |

a. These are not direct comparisons. Results are presented in this way to give a general comparison of results based on species composition and general abundance estimates. See text for discussion of results.
b. Grid C, Table 3.14; Terrestrial Annual Report (1977). Based on total captures and 845 total trap nights.
c. Based on total captures, not total individuals.
d. 1977 Interim Monitoring Results Based on 120 total trap nights.
e. Based on three year average.

second most abundant mammal captures. Chipmunks constituted 90 percent of the total captures in this habitat. Eight individual least chipmunks and eight individual Colorado chipmunks were recorded. Because of difficulties in identifying the two species in the field, the actual ratios may not be one to one. For both chipmunk species more males were captured than females (i.e., five males: three females for Colorado chipmunk and six males: two females for least chipmunks). Very few deer mice were caught in 1977. One golden mantled ground squirrel was also captured. The apparent increase in chipmunk populations since the 1975 and 1976 studies may be attributed to the different trapping methods used. Higher trapping success may result for these species when trap lines are used rather than grids because of the relatively large home ranges of these species. Deer mice appeared to be, and probably were, less abundant in 1977 than in 1975 and 1976. The lower trap success of this species in 1977 may be due to habitat variability between baseline and interim monitoring plots or natural yearly fluctuations, but trap success is not believed to have changed significantly as a result of differences in trapping methods only.

(c) Upland Sagebrush - Deer mice and least chipmunks were the dominant species captured in the upland sagebrush vegetation type during baseline studies (RBOSP 1977) and during interim monitoring studies (Table 15 ). Least chipmunks dominated in 1975, but deer mice were most common in 1976. Both species were captured in about the same numbers in 1977. Deer mice appeared to be the most abundant species over the three-year survey period in this vegetation type.

(d) Comparisons Among Vegetation Types - The mixed brush vegetation type had the highest average numbers of captures per 100 trap nights (31.3) for the three survey periods. The pinyon-juniper vegetation type and the upland sagebrush vegetation type had similar average numbers of captures per 100 trap nights, 19.5 and 21.0, respectively for the three survey periods. During interim monitoring studies, the greatest number of captures were in the pinyon-juniper habitat, and mixed brush and upland sagebrush habitats had fewer but approximately equal numbers of captures per 100 trap nights.

TABLE 15

COMPARISON OF SMALL MAMMAL TRAPPING RESULTS IN THE UPLAND SAGEBRUSH VEGETATION TYPE - MAY 1975, 1976, AND 1977, FOR RBOSP[a]

| Species | Grid 2[b] | | | | Grid D[c] | | | | 1977[d] | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1975 | | 1976 | | 1975 | | 1976 | | | | |
| | Total Captures | Captures/ 100 Trap Nights | Total Captures | Captures/ 100 Trap Nights | Total Captures | Captures/ 100 Trap Nights | Total Captures | Captures/ 100 Trap Nights | Total Captures | Captures/ 100 Trap Nights | Av. Captures[e]/ 100 Trap Nights |
| *Eutamias minimus* (Least chipmunk) | 23 | 12 | | | 87 | 10 | 25 | 3 | 10 | 8 | 6.6 |
| *Peromyscus maniculatus* (Deer mouse) | 14 | 7 | 58 | 30 | 49 | 5 | 102 | 12 | 11 | 9 | 12.6 |
| *Spermophilus tricedenlineatus* (Thirteen-lined ground squirrel) | 7 | 4 | 4 | 2 | | | | | | | 1.2 |
| *Spermophilus lateralis* (Golden-mantled ground squirrel) | | | | | 5 | 1 | 17 | 2 | | | .6 |
| *Lagurus curtatus* (Sagebrush vole) | | | | | 2 | <1 | 1 | <1 | | | <1 |
| *Peromyscus truei* (Pinyon mouse) | — | — | — | — | — | — | 1 | <1 | — | — | <1 |
| Total | 44 | 23 | 62 | 32 | 143 | 16 | 146 | 17 | 21 | 17 | 21.0 |

a. These are not direct comparisons. Results are presented in this way to give a general comparison of results based on species composition and general abundance estimates. See text for discussion of results.
b. Grid 5, Table 3.14; Terrestrail Annual Report (1977). Based on total and 195 total trap nights.
c. Baseline data. Based on total captures and 845 total trap nights.
d. 1977 Interim Monitoring Results. Based on 120 total trap nights.
e. Based on three year average.

Based on general comparisons, it appears that small mammal populations have decreased in the mixed brush and upland sagebrush habitats and increased in the pinyon-juniper habitat since baseline studies in 1975 and 1976.

# CHAPTER 5 - AVIFAUNA STUDIES

## 5.1 OBJECTIVES

Breeding bird studies were conducted during the interim monitoring period (June, 1977) to determine species composition and breeding bird population levels in the selected habitats and to describe the territories and reproductive status of each species. Results of these studies were compared to baseline information.

## 5.2 METHODS

The breeding bird studies were conducted June 1 - 10, 1977. The "International Breeding Bird Plot Census" technique (Int. Breeding Bird Comm. 1970) was used to evaluate breeding bird populations. The preferred study plot shape (300 m x 400 m) could not be used in the pinyon-juniper and upland sagebrush vegetation types and was modified so that all one-hectare units would be in a homogenous vegetation type. This modification was necessary because few homogenous vegetation types on Tract C-a are large enough to contain a 300 m x 400 m rectangular plot.

Each study plot was censused on consecutive days, when possible. Three replicates of each one-hectare unit were completed in a prescribed manner. (Sample data sheets are presented in Appendix J.) Census runs were completed within 3-1/2 hours of sunrise.

A detailed description of the sampling methods was presented in the first RBOSP Semi-Annual Report (1977).

## 5.3 RESULTS AND DISCUSSION

Individual observations from each census run were plotted on a composite map (Appendix K). Locations of breeding birds were summarized for each vegetation type (Figures 12 - 14 ).

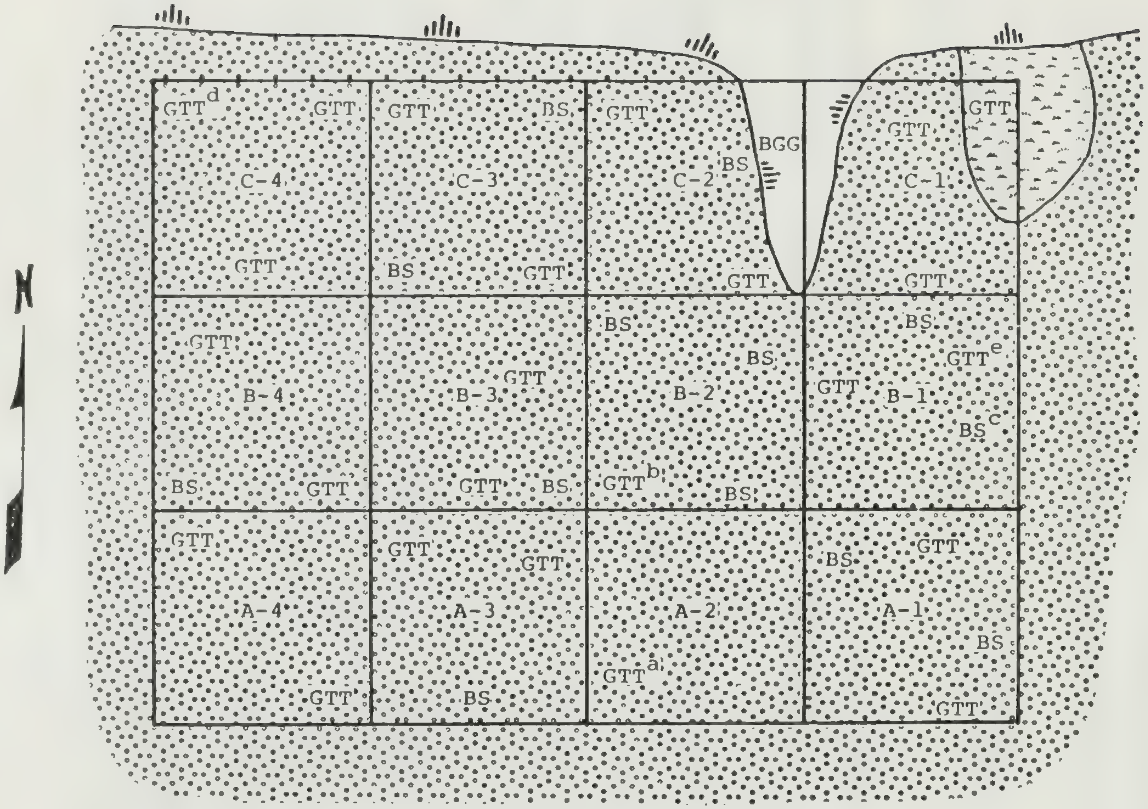
Detailed comparisons of breeding bird results cannot be made between baseline and interim monitoring studies because of the use of different censusing techniques (Emlen method and International Breeding Bird Plot Census technique, respectively) and because the studies were not conducted on the same plots. Differences in vegetation, slope, and aspect could account for species variability between sampling periods. Certain considerations must be taken into account when comparing data collected by these methods:

- The Emlen method (Emlen 1971) is a strip census conducted over relatively long distances and therefore, likely to include more than one vegetation type.
- The Emlen method is used to census all birds observed (except raptors), whereas the International Breeding Bird Plot Census technique is limited to breeding birds.

General comparisons will be made of baseline and interim studies regarding species composition and relative abundance of breading birds.

(a) Mixed Brush - Seventeen species of birds were observed in the mixed brush study area (Table 16 ). Eleven species were recorded during the census and six species were observed after census was completed. Green-tailed towhee, Brewer's sparrow and blue-gray gnatcatcher were recorded as breeding species. Four blue-listed species (marsh hawk, American kestrel, mountain bluebird, and vesper sparrow) (Arbib 1977) foraged or flew over the study area but were not expected to breed there.

Green-tailed towhees were the dominant breeding species (Table 16 ). Four green-tailed towhee nests, each containing four eggs, were found on the study area (Figure 12 ).




1 Block = 1 Hectare (ha.) = 100 Meters x 100 Meters
Total estimated breeding pairs/12 ha. = 38 or 3.16 pairs/ha.
A-1, B-1, C-1, etc. = 1 ha. units

LEGEND

GTT – Green-tailed Towhee
BS – Brewer's Sparrow
BGG – Blue-gray Gnatcatcher

a – GTT – Nest - 4 young (hatched 6/3/77) - Mixed sagebrush, serviceberry - ground

b – GTT – Nest - 4 eggs (not hatched 6/10/77) - Serviceberry - 10" high

c – BS – Nest - nest building abandoned - Sagebrush - 2' high

d – GTT – Nest - 4 young (hatched 6/9/77) - Mixed sagebrush, serviceberry - 10" high

e – GTT – Nest - 4 eggs (predation 6/9/77) - Mixed sagebrush, serviceberry - 6" high

Sagebrush / Utah Serviceberry / Mountain Mohogany

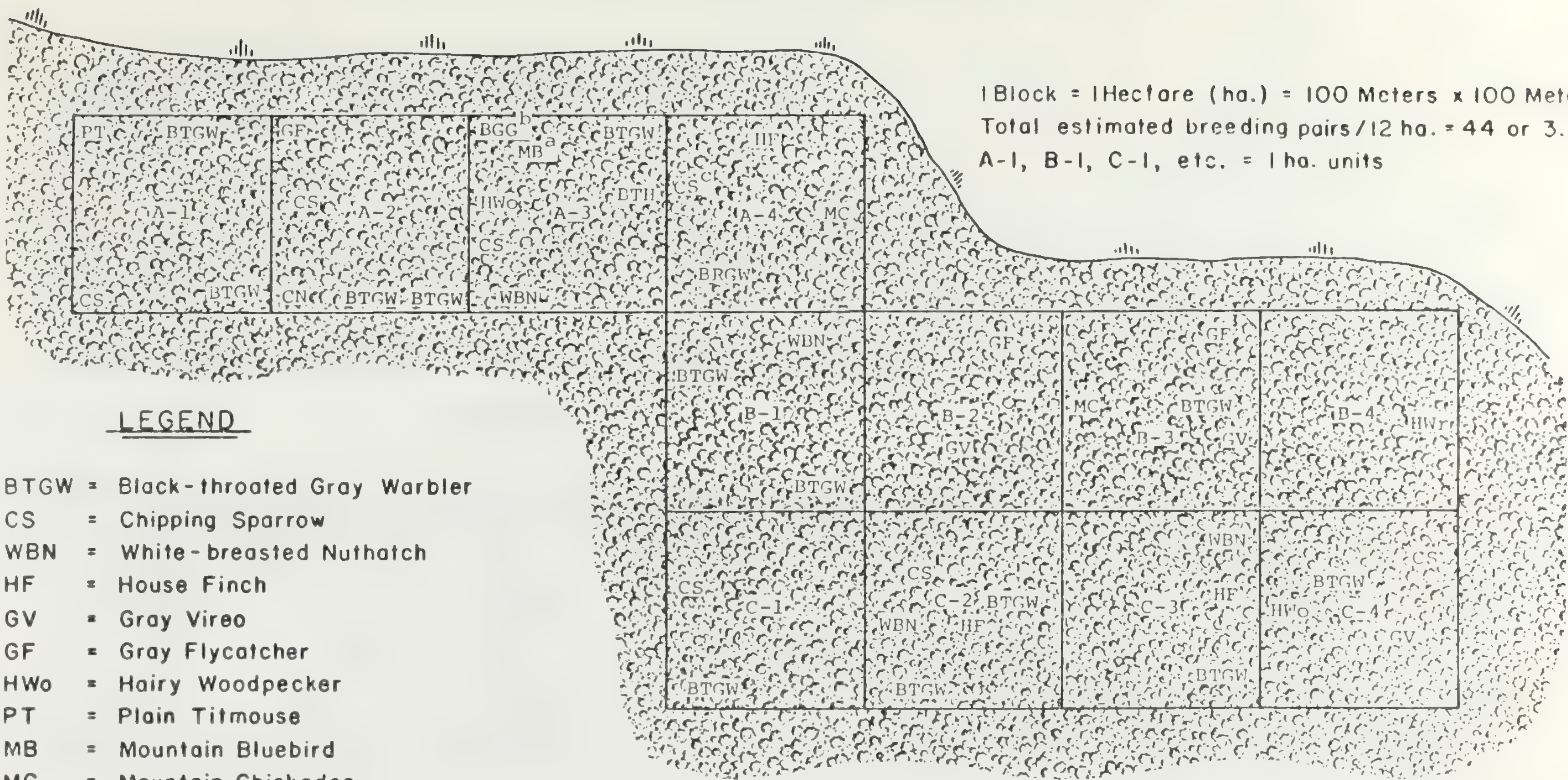
Grass

Ravine

NOTE: See Figure 11 for locations of plots

FIGURE 12

LOCATIONS OF BREEDING BIRDS IN THE MIXED BRUSH VEGETATION TYPE, JUNE 1, 2, 3, 1977, FOR RBOSP TRACT C-a




1 Block = 1 Hectare (ha.) = 100 Meters x 100 Meters
Total estimated breeding pairs/12 ha. = 44 or 3.65 pairs/ha.
A-1, B-1, C-1, etc. = 1 ha. units

LEGEND

BTGW = Black-throated Gray Warbler
CS = Chipping Sparrow
WBN = White-breasted Nuthatch
HF = House Finch
GV = Gray Vireo
GF = Gray Flycatcher
HWo = Hairy Woodpecker
PT = Plain Titmouse
MB = Mountain Bluebird
MC = Mountain Chickadee
CN = Common Nighthawk
BGG = Blue-gray Gnatcatcher
HWr = House Wren
BTH = Broad-tailed Hummingbird

Pinyon / Juniper

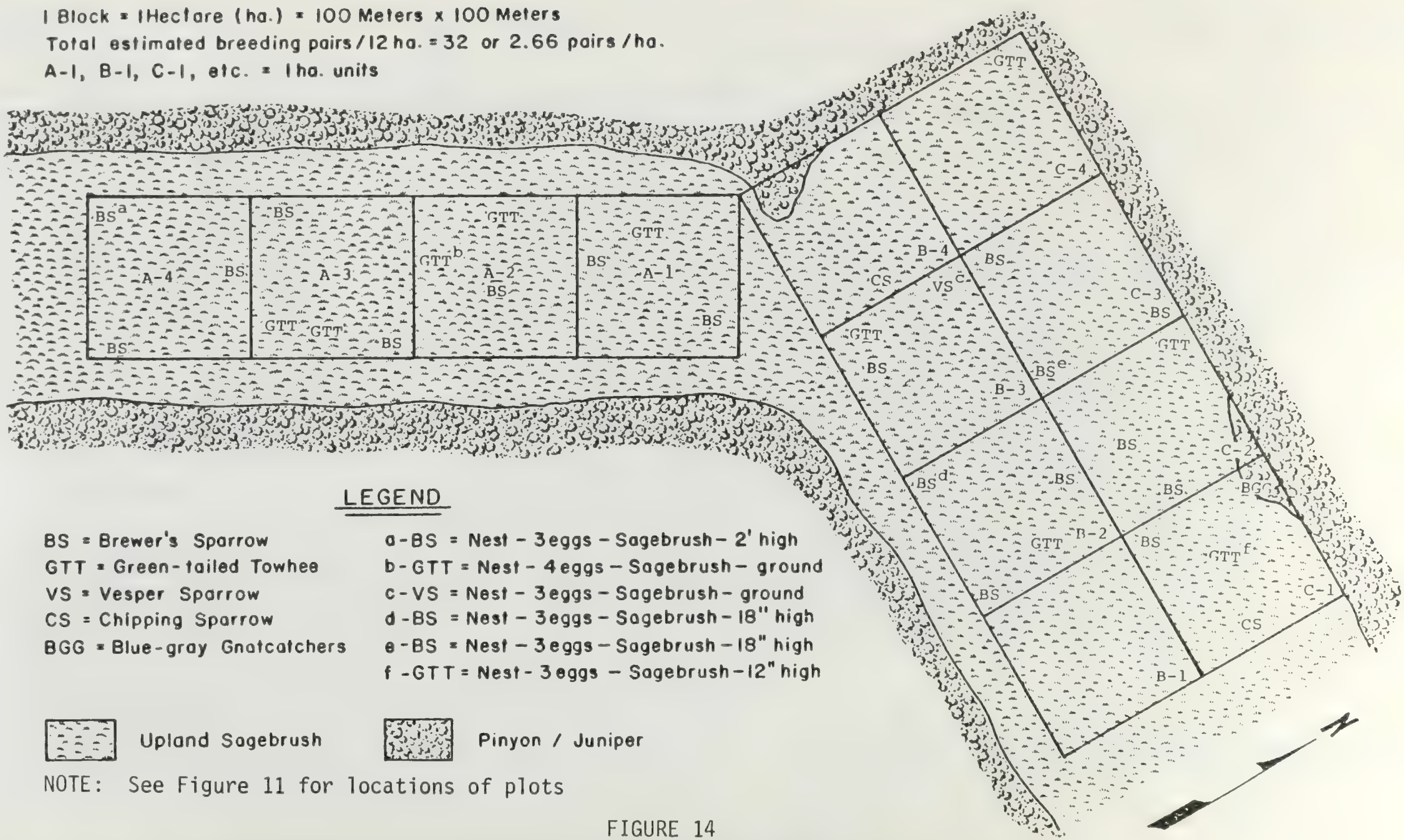
a-MB = Nest - 1 fledged young seen - Hole above limb in dead Juniper - 5 1/2' high
b-BGG = Nest - building nest - Dead, blown down Pinyon - horizontal limb - cup - 8' high
c-CS = Carrying nest material

NOTE: See Figure 11 for locations of plots
Ravine

N

FIGURE 13

LOCATIONS OF BREEDING BIRDS IN THE PINYON-JUNIPER VEGETATION TYPE, JUNE 4, 5, 6, 1977, FOR RBOSP TRACT C-a




NOTE: See Figure 11 for locations of plots

FIGURE 14

LOCATIONS OF BREEDING BIRDS IN THE UPLAND SAGEBRUSH VEGETATION TYPE, JUNE 7, 8, 10, 1977, FOR RBOSP TRACT C-a

TABLE 16

BREEDING BIRD ESTIMATES FOR THE MIXED BRUSH VEGETATION TYPE - JUNE 1, 2, 3, 1977, FOR RBOSP[a]

| Species[a] | Special Status[b] | Reproductive Status | # Birds per Census Run[c] | Range | Mean | Estimated Number of Breeding Pairs/12 ha[d] | Estimated Number of Breeding Pairs/ha | Estimated Density Birds/ha | Estimated Number of Birds/km$^2$ | Abundance Categories[e] |
|---|---|---|---|---|---|---|---|---|---|---|
| Green-tailed Towhee | | Breeding | 13, 16, 17 | 13-17 | 15.3 | 24 | 2.00 | 4.00 | 399.8 | 20 Very abundant |
| Brewer's Sparrow | | Breeding | 4, 9, 9 | 4-9 | 7.3 | 13 | 1.08 | 2.16 | 215.9 | 20 Very abundant |
| Blue-gray Gnatcatcher | | Breeding | 1, 1, 1 | 1-1 | 1.0 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| [f] Rough-winged Swallow | | Foraging | 1, 1, 1 | | | | | | | |
| [f] Common Flicker | | Flying Over | 0, 2, 0 | | | | | | | |
| [f] Scrub Jay | | Foraging | 1, 0, 1 | | | | | | | |
| [f] Broad-tailed Hummingbird | | Foraging | 1, 0, 0 | | | | | | | |
| [f] Western Kingbird | | Foraging | 0, 0, 1 | | | | | | | |
| [f] Black-billed Magpie | | Foraging | 0, 1, 0 | | | | | | | |
| [f] Common Raven | | Foraging | 0, 0, 1 | | | | | | | |
| [f] Mountain Chickadee | | Foraging | 0, 0, 1 | | | | | | | |
| [g] Marsh Hawk | BL | Foraging | | | | | | | | |
| [g] American Kestrel | BL | Foraging | | | | | | | | |
| [g] Barn Swallow | | Foraging | | | | | | | | |
| [g] Mountain Bluebird | BL | Foraging | | | | | | | | |
| [g] Western Meadowlark | | Flying Over | | | | | | | | |
| [g] Vesper Sparrow | BL | Flying Over | | | | | | | | |
| Totals[h] | | | | | 23.6 | 38 | 3.16 | 6.32 | 631.7 | |

a. Listed in order of importance (birds observed during census) or AOU checklist order (birds observed after census completed).
b. BL - Blue List Arbib (1977).
c. Number of singing males or breeding pairs indicated during each replicate.
d. Based on territory mapping of census results using "International Breeding Bird Plot Census" technique.
e. From Graul (1976)
f. Number of observations of each species. No breeding information given because species not believed to breed on study plot.
g. Observed on plot or flying over after completion of census run.
h. Breeding Species only.

Brewer's sparrows and blue-gray gnatcatchers probably also bred on the study area (Table 16; Figure 12). An estimated 38 pairs of birds bred on the mixed brush study area in 1977.

Density comparisons of baseline and 1977 studies are given in Table 17. Three breeding species were recorded in 1975, seven breeding species in 1976, and three breeding species in 1977. Blue-gray gnatcatchers and green-tailed towhees were recorded during each survey period. Two species, broad-tailed hummingbird and Brewer's sparrow, were recorded as breeding species during at least two survey periods.

Green-tailed towhees had the highest density in 1976 and 1977 (Table 17 ). Green-tailed towhees seem to prefer areas with fairly dense, low ground cover (for nesting) and tall shrubs which are used for singing perches. The study area provides excellent breeding habitat for green-tailed towhees, as shown by the extremely high density estimates; in these habitats, it is usually the most common breeding species.

Brewer's sparrows had the second highest density in 1977 (Table 17). No other bird is more characteristic of the arid sagebrush country of the Great Basin and Pacific Slopes where Brewer's sparrow is often abundant both as a migrant and resident (Bent 1968). This sparrow is considered "common" in its preferred habitat.

The vesper sparrow was not reported in 1975 or 1977 but is listed as a common migrant and summer resident throughout Colorado on the plains and in the foothills between 5,000 and 9,000 feet. Vesper sparrows were commonly observed in agriculture and upland sagebrush habitats near 84 Mesa in 1976 (RBOSP 1977) but were not abundant in either area in 1975. Vesper sparrows were seen in riparian, agriculture, and lowland sagebrush habitats in 1977. Vesper sparrows are on the Blue List for 1977 (Arbib 1977). The addition of this species to the Blue List was requested by several regions including the Northern Rocky Mountain Region. It is unclear whether or not the species is declining in the Piceance Creek Basin region or is undergoing normal population variations.

TABLE 17

DENSITY COMPARISONS OF BREEDING SPECIES OBSERVED IN THE MIXED BRUSH VEGETATION TYPE DURING SURVEYS IN 1975, 1976, and 1977 NEAR TRACT C-a

| Species | 6/5/75[a,b] Dens./ha[d] | 6/9/76[a,b] Dens./ha[d] | 6/1,2,3/77[a,c] Dens./ha[d] |
|---|---|---|---|
| Blue-gray Gnatcatcher | .82 | .82 | .16 |
| Green-tailed Towhee | .35 | 1.29 | 4.00 |
| Broad-tailed Hummingbird | .61 | .82 | * |
| Brewer's Sparrow | * | .05 | 2.16 |
| Vesper Sparrow | * | .82 | * |
| MacGullivray's Warbler | * | .61 | * |
| Song Sparrow | * | .41 | * |
| | 1.78/ha | 4.82/ha | 6.32/ha |
| | 177.9/$km^2$ | 481.8/$km^2$ | 631.8/$km^2$ |

a. This is not the complete list of birds observed during surveys. Only those species that could breed in the vegetation type are listed.

b. Densities from "Emlen Strip Census" method and are taken from transect 5, Terrestrial Annual Report (1977).

c. Densities from "International Breeding Bird Plot Census" techniques.

d. Individuals per hectare.

* Species not observed during this survey period.

About 65 percent of all individuals observed on the 1977 plot mixed brush were one species, and approximately 97 percent were two species. The density estimates for the mixed brush vegetation type near Tract C-a ranged from 177.9 individuals per square kilometer to 631.7 individuals per square kilometer (Table 16).

(b) Pinyon-Juniper - Eighteen species of birds were observed in the pinyon-juniper study area (Table 18). Seventeen species were observed during census runs and one species was observed after census runs were completed. Fourteen species probably bred on the study area in 1977. Three blue listed species (hairy woodpecker, mountain bluebird, and common nighthawks) (Arbib 1977) were recorded as breeding species.

Black-throated gray warblers were the most abundant breeding species, and chipping sparrows apparently had the second highest breeding density on the study area (Table 18). The gray vireo, gray flycatcher, white-breasted nuthatch and house finch were also recorded as being very abundant (classification defined by Graul 1976) on the study area, but were less abundant than the black-throated gray warbler and chipping sparrow (Table 18). The latter two species constituted approximately 45 percent of the total breeding population on the pinyon-juniper study area.

One mountain bluebird nest was found in a Utah juniper; another was found approximately five feet high in a natural cavity behind a dead limb. Adult birds were feeding one fledged young. A pair of blue-gray gnatcatchers was building a nest on a horizontal limb of a dead, uprooted pinyon pine; the nest was nearly completed by June 10.

An estimated 44 pairs of birds bred on the pinyon-juniper study area in 1977. Density comparisons between baseline and 1977 studies are presented in (Table 19). Thirteen breeding species were recorded in 1975, 20 breeding species in 1976, and 14 breeding species in 1977. Black-throated gray warbler, gray flycatcher, broadtailed hummingbird, mountain bluebird, and mountain chickadee

TABLE 18

BREEDING BIRD ESTIMATES FOR THE PINYON-JUNIPER VEGETATION TYPE - JUNE 4, 5, 6, 1977, FOR RBOSP

| Species[a] | Special Status[b] | Reproductive Status | # Birds per Census Run[c] | Range | Mean | Estimated Number of Breeding Pairs/12 ha[d] | Estimated Number of Breeding Pairs/ha | Estimated Density Birds/ha | Estimated Number of Birds/$km^2$ | Abundance Categories[e] |
|---|---|---|---|---|---|---|---|---|---|---|
| Black-throated Gray Warbler | | Breeding | 8, 10, 10 | 8-10 | 9.3 | 14 | 1.17 | 2.34 | 233.9 | 20 Very abundant |
| Chipping Sparrow | | Breeding | 7, 4, 3 | 3-7 | 4.7 | 7 | .58 | 1.16 | 116.0 | 19 Very abundant |
| Gray Vireo | | Breeding | 3, 1, 3 | 1-3 | 2.3 | 3 | .25 | .50 | 50.0 | 18 Very abundant |
| Gray Flycatcher | | Breeding | 3, 2, 2 | 2-3 | 2.3 | 3 | .25 | .50 | 50.0 | 18 Very abundant |
| White-breasted Nuthatch | | Breeding | 2, 2, 1 | 1-2 | 1.7 | 4 | .33 | .66 | 66.0 | 18 Very abundant |
| House Finch | | Breeding | 2, 0, 2 | 0-2 | 1.3 | 3 | .25 | .50 | 50.0 | 18 Very abundant |
| Hairy Woodpecker | BL | Breeding | 1, 1, 1 | 1-1 | 1.0 | 2 | .17 | .34 | 34.0 | 17 Abundant |
| Mountain Bluebird | BL | Breeding | 1, 1, 1 | 1-1 | 1.0 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| Mountain Chickadee | | Breeding | 1, 0, 1 | 0-1 | .7 | 2 | .17 | .34 | 34.0 | 17 Abundant |
| Common Nighthawk | BL | Breeding | 1, 0, 0 | 0-1 | .3 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| Broad-tailed Hummingbird | | Breeding | 0, 1, 0 | 0-1 | .3 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| Plain Titmouse | | Breeding | 1, 0, 0 | 0-1 | .3 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| House Wren | | Breeding | 0, 0, 1 | 0-1 | .3 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| Blue-gray Gnatcatcher | | Breeding | 0, 1, 0 | 0-1 | .3 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| [f]Common Raven | | Foraging | 0, 1, 1 | | | | | | | |
| [f]Brown-headed Cowbird | | Foraging | 0, 2, 0 | | | | | | | |
| [f]Mourning Dove | | Foraging | 1, 0, 0 | | | | | | | |
| [g]Shrub Jay | | Flying Over | | | | | | | | |
| Totals[h] | | | | | 25.8 | 44 | 3.65 | 7.30 | 729.7 | |

a. Listed in order of importance (birds observed during census) or AOU checklist order (birds observed after census completed).
b. BL - Blue List Arbib (1977).
c. Number of singing males or breeding pairs indicated during each replicate.
d. Based on territory mapping of census results using "International Breeding Bird Plot Census" technique.
e. From Graul (1976).
f. Number of observations of each species. No breeding information given because species not believed to breed on study plot.
g. Observed on plot or flying over after completion of census run.
h. Breeding Species only.

TABLE 19

DENSITY COMPARISONS OF BREEDING SPECIES OBSERVED IN THE PINYON-JUNIPER VEGETATION TYPE DURING SURVEYS IN 1975, 1976, AND 1977

| Species | 6/5/75[a,b] Dens./ha[d] | 6/9/76[a,b] Dens./ha[d] | 6/4,5,6/77[a,c] Dens./ha[d] |
|---|---|---|---|
| Chipping Sparrow | 6.15 | * | 1.16 |
| Black-throated Gray Warbler | 1.23 | 1.33 | 2.34 |
| Gray Flycatcher | .31 | .46 | .50 |
| Broad-tailed Hummingbird | .31 | .20 | .16 |
| Mountain Bluebird | .31 | .20 | .16 |
| Mountain Chickadee | .20 | .61 | .34 |
| House Finch | * | 1.84 | .50 |
| Blue-gray Gnatcatcher | * | 1.23 | .16 |
| Plain Titmouse | * | .82 | .16 |
| White-breasted Nuthatch | * | .20 | .66 |
| Common Nighthawk | * | .05 | .16 |
| Gray-headed Junco | .41 | 2.87 | * |
| Solitary Vireo | .20 | .41 | * |
| Common Flicker | .15 | .05 | * |
| Green-tailed Towhee | .27 | .14 | * |
| Brown-headed Cowbird | .10 | * | * |
| Grasshopper Sparrow | .20 | * | * |
| Brewer's Sparrow | .10 | * | * |
| Mourning Dove | * | .51 | * |
| American Robin | * | .41 | * |
| Virginia's Warbler | * | .31 | * |
| Western Wood Pewee | * | .10 | * |
| Scrub Jay | * | .05 | * |
| Gray Vireo | * | * | .50 |
| Hairy Woodpecker | * | * | .34 |
| House Wren | * | * | .16 |
| Vesper Sparrow | * | .31 | * |
| | 9.94/ha | 12.10/ha | 7.30/ha |
| | 993.6/km² | 1209.5/km² | 729.7/km² |

a. This is a complete list of birds observed during 1975 and 1976 surveys. It is not a complete list of birds observed during 1977 surveys. Only those species believed to breed in the study area are listed.

b. Densities from Emlen Strip Census method and are taken from transect 10, Terrestrial Annual Report (1977).

c. Densities from "International Breeding Plot Census" technique.

d. Individuals per hectare.

e. Average given for all three years.

* Species not observed during this survey period.

were recorded as breeding species during all three survey periods. House finch, blue-gray gnatcatcher, plain titmouse, white-breasted nuthatch, and common nighthawk were recorded in 1976 and 1977. Ten species recorded in 1976 were also recorded in 1977.

Black-throated gray warblers had the highest density in 1977 (2.34 individuals/hectare). Balda (1969) found this species to average 1.18 individuals per hectare in an oak-juniper woodland in Arizona. Chipping sparrows were the second most abundant bird observed in 1977. They were very abundant during 1975 surveys, but were not observed in the pinyon-juniper type in 1976. Balda (1969) found this species to average 1.48 individuals per hectare in an oak juniper woodland in Arizona.

Cavity nesting species recorded in 1977 include plain titmouse, mountain bluebird, mountain chickadee, white-breasted nuthatch, hairy woodpecker, and house wren. These six species made up approximately 42 percent of the total number of species observed in 1977, but their total density was only 1.64 individuals per hectare (22% of total density for the study area). Total density of cavity nesting species in 1975 was .66 individuals per hectare and in 1976 was 1.88 individuals per hectare.

House finch, blue-gray gnatcatcher and gray headed junco were apparently less abundant in 1977 than in 1975 or 1976. House finches had the second highest density in 1976, but were not observed in 1975. The house finch is considered a very common nesting species (Bailey and Niedrach 1965). Blue-gray gnatcatchers nest in mid-June in Colorado. Only one pair was observed during the early June survey in 1977. The gray-headed junco was recorded as the most common breeding species in 1976 but was not observed in 1975 or 1977. Nest records for this common junco have been recorded from 6,000 to 11,500 feet with the greatest abundance from 8,000 to 11,000 feet. Bent (1963) stated that gray-headed juncos do not generally nest in extremely arid areas below 8,000 feet and prefer to nest in pine, spruce and aspen habitats. It is likely that the juncos recorded in 1976 were late migrants rather than breeders.

Mourning doves were not abundant in 1976 surveys and were not recorded as breeding species during 1975 and 1977 surveys. They are, however, a very common nesting bird throughout Colorado from the Plains well into the Transition Zone, usually below 7,000 feet (Bailey and Niedrach 1965). Mourning doves were observed in small flocks in ecotones and bottomland sagebrush on Tract C-a in 1977.

The pinyon-juniper habitats on Tract C-a had a greater breeding bird diversity (14) than mixed brush or upland sagebrush habitats (3 and 5 respectively). Carothers and Johnson (1975) found an average of 8.5 breeding species per plot in four, 10 acre pinyon-juniper plots. Total number of species, including summer visitors, for these plots averaged 12.2 in summer.

In 1975 one species made up 62 percent of the total breeding population and two species formed 74 percent of the total breeding population; total density was 993.6 individuals per square kilometer. In 1976, one species constituted 24 percent of the total breeding populations and two species made up 39 percent of the total breeding population; total density was 1,209.5 individuals per square kilometer. In 1977, one species represented 32 percent of the total breeding population and two species formed 49 percent of the total breeding population; total density was 729.7 individuals per square kilometer.

(c) Upland Sagebrush - Seventeen species of birds were observed in the upland sagebrush study area (Table 20, Figure 14). Nine species were observed during census runs and eight species were observed after completion of census runs (during nest checks). Brewer's sparrow, green-tailed towhee, chipping sparrow, and blue-gray gnatcatcher probably bred on the study area in 1977. Three blue listed species (mountain bluebird, vesper sparrow, and American kestrel) (Arbib 1977) were observed on the study area. Of these, only the vesper sparrow bred there.

The Brewer's sparrow and the green-tailed towhee were the dominant species in the upland sagebrush study area (Table 20, Figure 14). Three Brewer's sparrow nests and two green-tailed towhee nests were found (Figure 14).

## TABLE 20

## BREEDING BIRD ESTIMATES FOR THE UPLAND SAGEBRUSH VEGETATION TYPE - JUNE 7, 8, 10, 1977, FOR RBOSP

| Species[a] | Special Status[b] | Reproductive Status | # Birds per Census Run[c] | Range | Mean | Estimated Number of Breeding Pairs/12 ha[d] | Estimated Number of Breeding Pairs/ha | Estimated Density Birds/ha | Estimated Number of Birds/km$^2$ | Abundance Categories[e] |
|---|---|---|---|---|---|---|---|---|---|---|
| Brewer's Sparrow | | Breeding | 11, 13, 14 | 11-14 | 12.7 | 18 | 1.50 | 3.00 | 299.9 | 20 Very Abundant |
| Green-tailed Towhee | | Breeding | 3, 5, 6 | 3-6 | 4.7 | 10 | .83 | 1.66 | 165.9 | 19 Very Abundant |
| Chipping Sparrow | | Breeding | 0, 3, 0 | 0-3 | 1.0 | 2 | .17 | .34 | 34.0 | 17 Abundant |
| Vesper Sparrow | BL | Breeding | 1, 1, 1 | 1-1 | 1.0 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| Blue-gray Gnatcatcher | | Breeding | 1, 1, 1 | 1-1 | 1.0 | 1 | .08 | .16 | 16.0 | 16 Abundant |
| [f]Mountain Bluebird | BL | Foraging | 3, 2, 5 | | | | | | | |
| [f]Broad-tailed Hummingbird | | Foraging | 0, 3, 0 | | | | | | | |
| [f]Brown-headed Cowbird | | Foraging | 1, 0, 0 | | | | | | | |
| [f]Common Flicker | | Foraging | 0, 1, 0 | | | | | | | |
| [g]American Kestrel | BL | Foraging | | | | | | | | |
| [g]Mourning Dove | | Flying Over | | | | | | | | |
| [g]Gray Flycatcher | | Foraging | | | | | | | | |
| [g]Rough-winged Swallow | | Foraging | | | | | | | | |
| [g]Scrub Jay | | Foraging | | | | | | | | |
| [g]Common Raven | | Foraging | | | | | | | | |
| [g]Mountain Chickadee | | Foraging | | | | | | | | |
| [g]Black-throated Gray Warbler | | Flying Over | | | | | | | | |
| Totals[h] | | | | | 20.4 | 32 | 2.66 | 5.32 | 531.8 | |

a. Listed in order of importance (birds observed during census) or AOU checklist order (birds observed after census completed).
b. BL - Blue List (Arbib, 1977).
c. Number of singing males or breeding pairs indicated during each replicate.
d. Based on territory mapping of census results using "International Breeding Bird Plot Census" technique.
e. From Graul (1976).
f. Number of observations of each species. No breeding information given because species not believed to breed on study plot.
g. Observed on plot or flying over after completion of census run.
h. Breeding Species only.

Chipping sparrows, vesper sparrows, and blue-gray gnatcatchers probably bred on the study area (Table 20, Figure 14). One vesper sparrow nest was found (Figure 14). An estimated 32 pairs of birds bred on the study area in 1977.

Three breeding species were recorded during 1975 surveys, three in 1976 and five in 1977 (Table 21). Brewer's sparrow, green-tailed towhee, and vesper sparrow were recorded as breeding species during each survey period. Chipping sparrows and blue-gray gnatcatchers were also recorded as breeding species in 1977, but are not a significant part of the total breeding population in the upland sagebrush habitat.

Brewer's sparrows had the highest reported density during all three survey periods. The upland sagebrush plot censused in 1977 is dominated by sagebrush two to three feet tall which is ideal Brewer's sparrow nesting habitat in this part of Colorado.

Green-tailed towhees had the second highest density during all survey periods. Although some Utah serviceberry is found on the upland sagebrush plot, the density of mixed brush species is not sufficient to support as many green-tailed towhees as were found in the mixed brush plot censused in 1977.

The vesper sparrow population has apparently declined in each survey period; this species is on the 1977 Blue List (Arbib 1977) and may be declining in the Tract C-a region.

In 1975, Brewer's sparrows constituted 56 percent of the total breeding population. In 1976 this sparrow made up 62 percent of the total population; in 1977 it was 56 percent of the total breeding population. Two species, Brewer's sparrow and green-tailed towhee, made up 78 percent of the total breeding population in 1975, 84 percent in 1976, and 97 percent in 1977. These figures are similar to those of Wiens (1969). Total density ranged from 382.9 to 531.8 individuals per square kilometer. These figures are higher than those suggested by Wiens (1969) and indicate that upland sagebrush habitats on Tract C-a support above average avifauna populations.

TABLE 21

DENSITY COMPARISONS OF BREEDING SPECIES OBSERVED IN THE UPLAND SAGEBRUSH VEGEGATION TYPE DURING SURVEYS IN 1975, 1976, AND 1977 ON RBOSP TRACT C-a

| Species | 6/5/75[a,b] Dens./ha[d] | 6/9/76[a,b] Dens./ha[d] | 6/7/8,1o/77[a,c] Dens./ha[d] |
|---|---|---|---|
| Brewer's Sparrow | 2.72 | 2.40 | 3.00 |
| Green-tailed Towhee | 1.15 | .90 | 1.66 |
| Vesper Sparrow | 1.05 | .53 | .16 |
| Chipping Sparrow | * | * | .34 |
| Blue-gray Gnatcatcher | * | * | .16 |
| | 4.92/ha | 3.83/ha | 5.32/ha |
| | 491.8/$km^2$ | 382.9/$km^2$ | 531.8/$km^2$ |

a. This is not the complete list of birds observed during surveys. Only those species that could breed in the vegeation type are listed.

b. Densities from "Emlen Strip Census" method and are taken from transect 11, Terrestrial Annual Report (1977).

c. Densities from "International Breeding Bird Plot Census" techniques.

d. Individuals per hectare.

e. Average given for all three years.

* Species not observed during this survey period.

# CHAPTER 6 - THREATENED AND ENDANGERED SPECIES

## 6.1 OBJECTIVES

The interim monitoring program was designed to provide additional information on the use of Tract C-a, 84 Mesa and adjacent areas by threatened or endangered species, particularly the greater sandhill crane, and to establish their current status in the area.

## 6.2 METHODS

Methods were similar to those used by BLM during the spring of 1976 (Getman 1976). Based on migration dates, the reconnaissance route was surveyed 15 times during the period of April 4 through May 17, 1977 (once a week from April 4 - 22 and May 9 - 17; and five times a week from April 23 - May 8). The route included 35 designated sampling points (Figure 15). Areas between points were observed while driving to the next observation point. Some points were inspected by walking to a nearby vantage point; however, most were scanned from a four-wheel drive vehicle to minimize the possibility of disturbing the birds.

Additional details regarding the endangered species study were presented in the first RBOSP Semi-Annual Report (1977).

## 6.3 RESULTS AND DISCUSSION

No greater sandhill cranes or whooping cranes were observed during the spring of 1977.

In the past, up to 30 greater sandhill cranes were observed displaying and foraging on 84 Mesa and areas northeast of Tract C-a on April 17 - 30, 1975. In the fall of 1975, five and six greater sandhill cranes were observed on October 25 and 26 on the southeast corner of 84 Mesa. The last observations of cranes were made in spring of 1976. Two greater sandhill cranes were

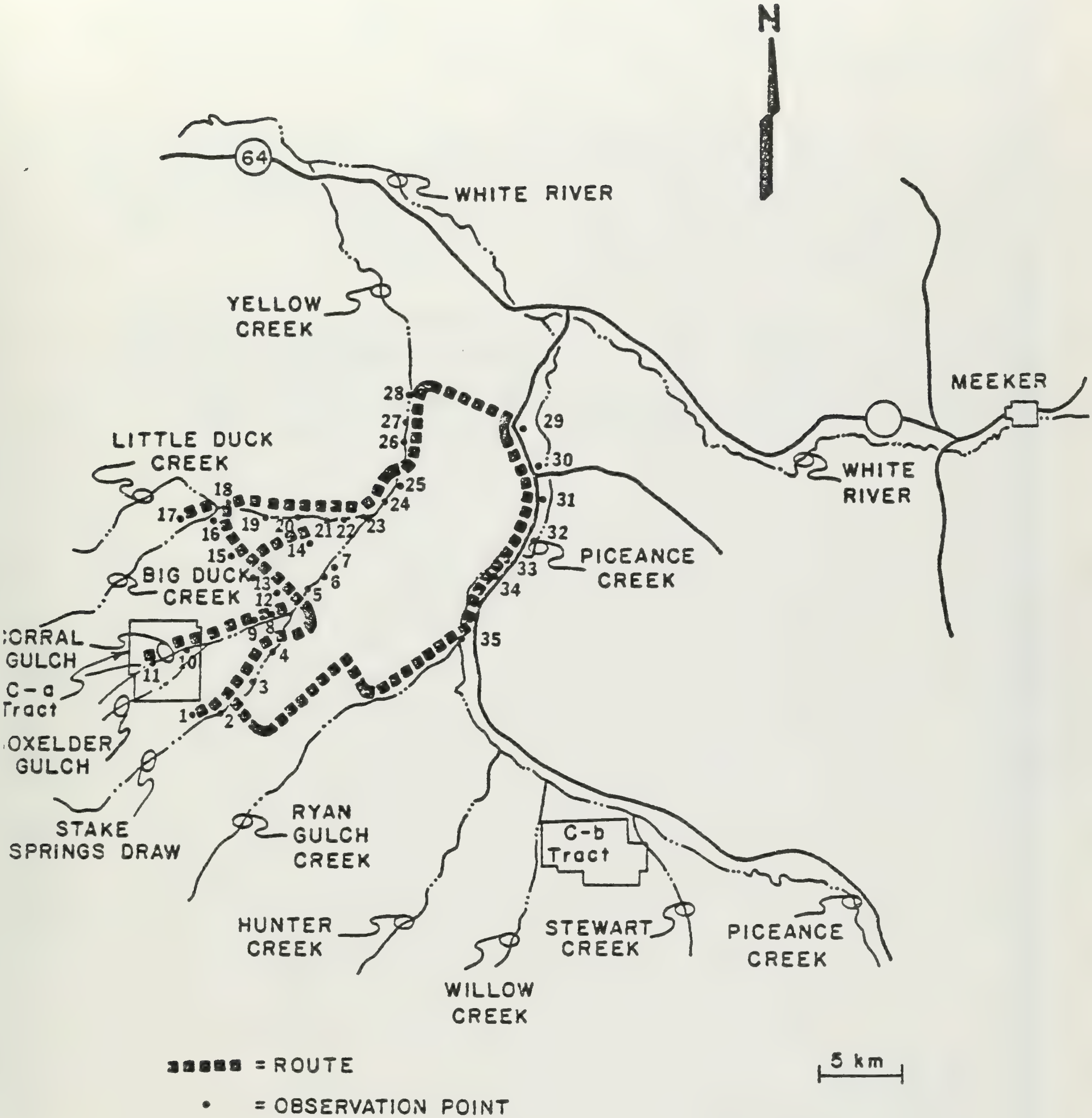



FIGURE 15

RECONNAISSANCE ROUTE FOR GREATER SANDHILL CRANE AND WHOOPING CRANE STUDIES, SPRING 1977; FOR RBOSP

sighted on April 27 - 28, 1976 at the Stake Springs Draw impoundment and a flock of four greater sandhill cranes and one whooping crane were recorded foraging on May 3, 1976 in agricultural habitat along Yellow Creek, just east of 84 Ranch.

The lack of crane observations during the spring of 1977 is apparently related to the lack of breeding habitat near Tract C-a (Getman 1976) and because most observations in the past were opportunistic and of small groups of cranes. Thus, additional crane observations were not expected.

Important bird species which were observed during the survey included the sage grouse and golden eagle. Three male and two female sage grouse were observed in late April on 84 Mesa. A female golden eagle had a nest and one eaglet along Ryan Gulch Road about two miles west of Piceance Creek.

# SECTION III

## HYDROLOGY STUDIES

SECTION III - HYDROLOGICAL STUDIES

Extensive hydrology data were collected from Tract C-a during the baseline monitoring program. The hydrology program included studies of precipitation, surface water, and groundwater. The United States Geological Survey (USGS) operated 11 gaging stations in the vicinity of Tract C-a. These stations continuously and automatically monitored stream temperature, conductivity, flow and sediment load during the spring, summer, and fall. During the winter, three stations were operated. The USGS also conducted extensive monthly water sampling and analysis programs at each of these stations during periods of stream flow.

Precipitation data were collected at six stations in the vicinity of Tract C-a. Three of these stations were associated with surface gaging stations and supplied cumulative precipitation data. The other three stations monitored storm or short-term precipitation events as well as cumulative precipitation. These six stations were used to monitor precipitation during the interim period.

Fifteen alluvial aquifer monitoring holes were completed in the vicinity of Tract C-a during baseline studies. Seven failed to produce water during drilling and did not contain water during the baseline program. Eight holes had continuously measurable water levels from the time drilling began to the end of the baseline period. Water level, pH, temperature, and conductivity were determined in the field monthly at each of these eight stations. Extensive water quality analyses were also performed on water samples taken from these holes on a monthly basis. In order to provide continuity through the interim period, a single alluvial monitor hole was selected and monitored on a quarterly basis. This hole was G-S S-11.

During various pre-lease exploration programs, two deep groundwater aquifers were identified and some of their relative characteristics identified. RBOSP gathered additional data from their drilling, monitoring, and pumping test programs. The results of all of these programs have shown that the upper aquifer is located near the base of the Parachute Creek member of the Green River

Formation. Water quality of the upper aquifer was generally found to be better than that of the lower aquifers. Water level was continuously monitored in a number of wells in each aquifer. The continuous monitoring of G-S 4-5 in both both the upper and lower aquifers was continued through the interim period to provide continuity with the baseline data.

Wright Water Engineers (WWE) has been the hydrologic consultant for RBOSP and as such has collected the groundwater data and has reported all hydrologic data. Data have been presented in Quarterly Reports 1 through 11, DDP of March 1976, The first RBOSP Final Environmental Baseline Report (1977), and the first RBOSP Semi-Annual Report (1977).

# CHAPTER 1 - SURFACE WATER

## 1.1 OBJECTIVES

The objectives of these studies were to provide basic information on stream conditions during the interim period and to compare interim data with established baseline data.

## 1.2 METHODS

The Tract C-a surface water monitoring program during the interim period consisted of two major components: (1) the continuation of the continuous and automatic monitoring of the surface water; (2) the semi-annual monitoring of a limited number of physical and chemical constituents of these waters. The methods used during the interim studies were described in the first RBOSP Semi-Annual Report (1977). During the interim period, only two stations were monitored (see Figure 16 for locations). These are the USGS gaging station located on Corral Gulch East of Tract C-a, and the gaging station located at the mouth of Yellow Creek near the confluence with the White River. In addition, a sample was collected during the interim period from the White

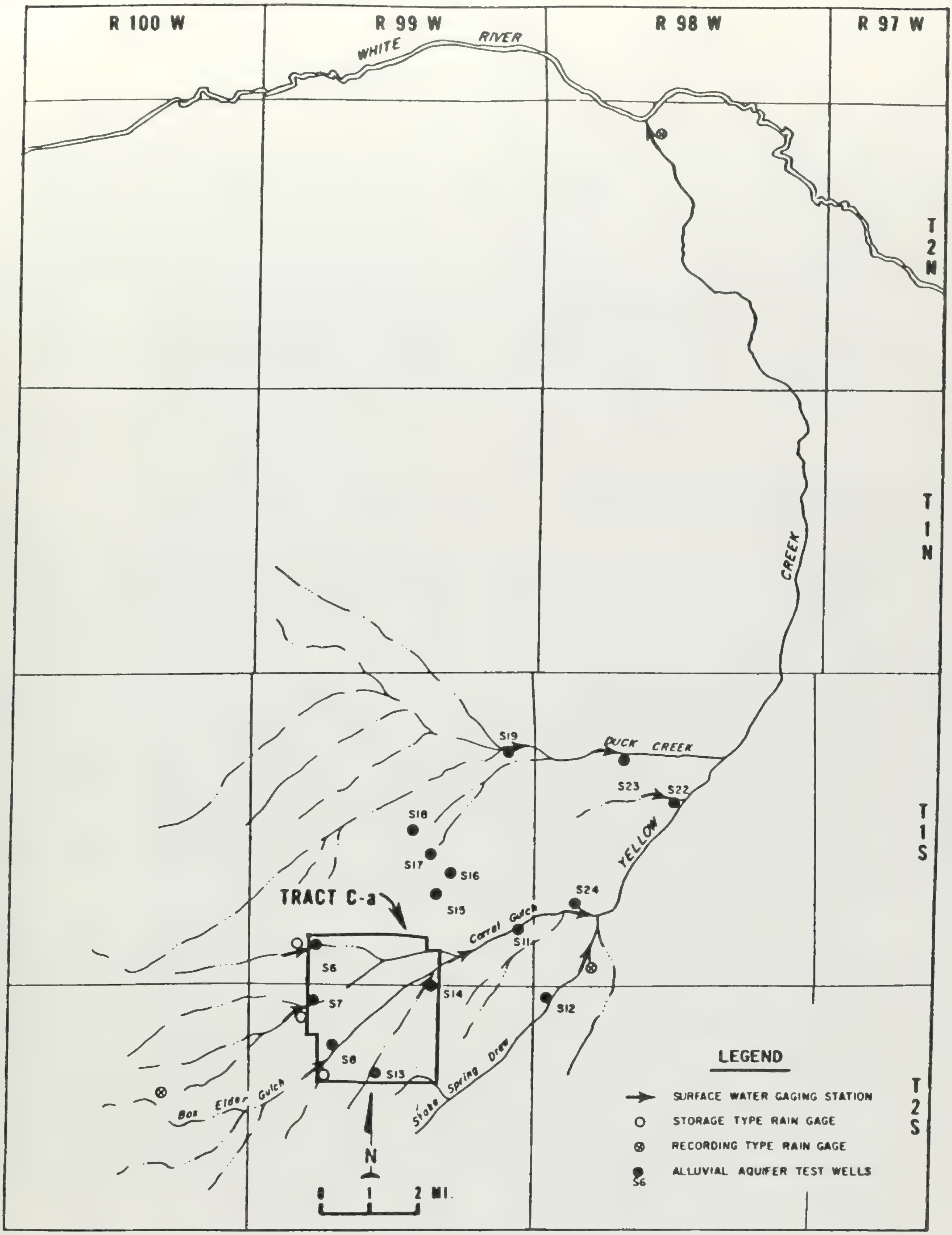



FIGURE 16

SURFACE WATER GAGING, ALLUVIAL
HOLE LOCATION

River, approximately 30 m downstream from the confluence of the White River and Yellow Creek in a side channel. However, at this time, the data have not been received from the USGS. In addition, samples were to be collected from any unusual flow events occurring at any of the seven gaging stations used to collect the baseline data. It should be noted that such a flow event did occur on July 23, 1977, however, the USGS was not on the tract to collect samples.

## 1.3 DISCUSSION AND RESULTS

Surface water quality data were collected from Corral Gulch Gaging Station East of Tract C-a, from the Yellow Creek Gaging Station at the confluence with the White River, and from the White River (∿30 m downstream from the confluence with Yellow Creek in a side channel) (Appendix L). More than the required minimum of one sample semi-annually was collected during the interim period at the Corral Gulch Station. As shown on Table 22, samples were collected October 12, 1976, and April 18, 1977, while at the Yellow Creek Gaging Station samples were collected on October 7, 1976, November 5, 1976, and April 12, 1977. The results of these analyses are presented on Table 23. At the time of this report, data have not been received for samples taken from White River.

For comparison purposes, Tables 24 and 25 which are the Baseline Surface Water Quality Summary of the Corral Gulch East of Tract C-a and Yellow Creek near White River, respectively, from the Final Environmental Report are included. A comparison of the water qualities during the baseline and interim periods for Corral Gulch East of Tract C-a indicates that all of the constituents monitored during the interim period were within the maximum-minimum limits established during the baseline period. Only a few of the constituents varied substantially from the geometric mean. The constituents which did show some variation included chloride, copper, nitrate plus nitrite, dissolved organic carbon, and selenium. The only parameters at the Yellow Creek Gaging Station which were not extremely close to the geometric mean established during the baseline period were arsenic, cadmium, carbonate, copper, lead, nitrate plus nitrite,

TABLE 22

PHYSICAL AND CHEMICAL WATER QUALITY AT SURFACE STATIONS

CORRAL GULCH EAST OF TRACT C-a

| Parameter Number | Parameter | Oct. 12 1976 | April 18 1977 | Baseline Mean |
|---|---|---|---|---|
| 1000 | Arsenic (ug/l) | | 5.00 | 5.33 |
| 446 | Bicarbonate (mg/l) | 423.00 | 500.00 | 492.00 |
| 1020 | Boron (ug/l) | 130.00 | 110.00 | 116.78 |
| 1025 | Cadmium (ug/l) | | 2.00 | 3.39 |
| 915 | Calcium (mg/l) | 79.00 | 86.00 | 85.56 |
| 445 | Carbonate (mg/l) | 0.00 | 0.00 | 0.00 |
| 940 | Chloride (mg/l) | 12.00 | 14.00 | 9.78 |
| 1030 | Chromium (ug/l) | | 0.00 | 2.79 |
| 95 | Conductivity, Specific (umhos) | 1100.00 | 1300.00 | 1231.54 |
| 1040 | Copper (ug/l) | | 1.00 | 2.15 |
| 300 | Dissolved Oxygen (mg/l) | 9.50 | 9.20 | 8.32 |
| 950 | Fluoride (mg/l) | 0.40 | 0.40 | 0.49 |
| 1049 | Lead (ug/l) | | 2.00 | 1.90 |
| 925 | Magnesium (mg/l) | 62.00 | 69.00 | 62.04 |
| 71890 | Mercury (ug/l) | 0.00 | 0.00 | 0.02 |
| 631 | Nitrate plus Nitrite (N) (mg/l) | 0.16 | 0.14 | 0.32 |
| 681 | Organic Carbon, Dissolved (mg/l) | 5.20 | 4.90 | 8.12 |
| 660 | Phosphate ($PO_4$) (mg/l) | 0.25 | | 0.06 |
| 935 | Potassium (mg/l) | 1.50 | 1.50 | 1.59 |
| 1145 | Selenium (ug/l) | | 2.00 | 2.96 |
| 955 | Silica ($SiO_2$) (mg/l) | 22.00 | 20.00 | 21.10 |
| 930 | Sodium (mg/l) | 100.00 | 120.00 | 109.15 |
| 540 | Solids, Dissolved (mg/l) | 766.00 | 878.00 | 822.87 |
| 945 | Sulfate (mg/l) | 280.00 | 320.00 | 288.77 |
| 11 | Temperature (F) | 51.80 | 57.20 | |

Blank value means parameter not analyzed

TABLE 23

PHYSICAL AND CHEMICAL WATER QUALITY AT SURFACE STATIONS

YELLOW CREEK NEAR WHITE RIVER, COLORADO

| Parameter Number | Parameter | Oct. 7 1976 | Nov. 5 1976 | Apr. 12 1977 | Baseline Mean |
|---|---|---|---|---|---|
| 1000 | Arsenic (ug/l) | | | 2.00 | 3.81 |
| 446 | Bicarbonate (mg/l) | 1300.00 | 1490.00 | 1730.00 | 1513.94 |
| 1020 | Boron (ug/l) | 740.00 | 690.00 | 630.00 | 691.87 |
| 1025 | Cadmium (ug/l) | | | 2.00 | 3.08 |
| 915 | Calcium (mg/l) | 22.00 | 21.00 | 39.00 | 31.81 |
| 445 | Carbonate (mg/l) | 277.00 | 251.00 | 120.00 | 49.58 |
| 940 | Chloride (mg/l) | 150.00 | 130.00 | 110.00 | 125.91 |
| 1030 | Chromium (ug/l) | | | 0.00 | 2.77 |
| 95 | Conductivity, Specific (umhos) | 3500.00 | 4500.00 | 3720.00 | 3689.72 |
| 1040 | Copper (ug/l) | | | 5.00 | < 3.12 |
| 300 | Dissolved Oxygen (mg/l) | 6.50 | 9.30 | 9.2 | 9.59 |
| 950 | Fluoride (mg/l) | 2.70 | 2.80 | 1.8 | 2.26 |
| 1049 | Lead (ug/l) | | | 3.00 | 2.14 |
| 925 | Magnesium (mg/l) | 110.00 | 110.00 | 120.00 | 108.24 |
| 71890 | Mercury (ug/l) | | | 0.00 | 0.02 |
| 631 | Nitrate plus Nitrite (N) (mg/l) | 0.06 | 0.56 | 0.69 | 0.41 |
| 681 | Organic Carbon, Dissolved (mg/l) | | 6.50 | | 8.97 |
| 660 | Phosphate ($PO_4$) (mg/l) | 0.09 | 0.12 | | 0.06 |
| 935 | Potassium (mg/l) | 4.50 | 3.90 | 4.2 | 4.14 |
| 1145 | Selenium (ug/l) | | | 1.00 | 1.90 |
| 955 | Silica ($SiO_2$) (mg/l) | 5.80 | 3.30 | 13.00 | 10.34 |
| 930 | Sodium (mg/l) | 800.00 | 830.00 | 800.00 | 776.28 |
| 540 | Solids, Dissolved (mg/l) | 2580.00 | 2630.00 | 2650.00 | 2512.67 |
| 945 | Sulfate (mg/l) | 570.00 | 540.00 | 590.00 | 556.14 |
| 11 | Temperature (F) | 59.90 | 50.90 | 46.40 | |

Blank value means parameter not analyzed.

TABLE 24

BASELINE SURFACE WATER QUALITY SUMMARY
YELLOW CREEK NEAR WHITE RIVER

| | | USGS Data | | | | | NUS Data | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Param. No. | Item | High | Low | Geo. Mean | Geo. Dev. | No. of Analy. | High | Low | Geo. Mean | Geo. Dev. | No. of Analy. |
| 410 | Alkalinity (mg/l) | 1670.00 | 894.00 | 1443.10 | 1.12 | 43 | | | | | |
| 1106 | Aluminum (ug/l) | 150.00 | <10.00 | 75.44 | 1.51 | 11 | | | | | |
| 71846 | Ammonia ($NH_4$) (mg/l) | 0.52 | <0.01 | 0.03 | 8.54 | 34 | 0.17 | <0.10 | 0.10 | 1.14 | 24 |
| 1000 | Arsenic (ug/l) | 10.00 | <0.01 | 3.81 | 3.05 | 36 | | | | | |
| 1005 | Barium (ug/l) | 400.00 | <50.00 | 165.13 | 1.82 | 35 | | | | | |
| 1010 | Beryllium (ug/l) | <20.00 | <4.00 | <7.22 | 1.86 | 7 | | | | | |
| 440 | Bicarbonate (mg/l) | 1990.00 | 596.00 | 1513.94 | 1.19 | 43 | | | | | |
| 1015 | Bismuth (ug/l) | <70.00 | <15.00 | <30.58 | 1.99 | 7 | | | | | |
| 310 | BOD (mg/l) | 5.80 | 1.00 | 1.93 | 2.20 | 4 | | | | | |
| 1020 | Boron (ug/l) | 880.00 | 230.00 | 691.87 | 1.15 | 43 | | | | | |
| 71870 | Bromide (mg/l) | 0.70 | 0.20 | 0.35 | 1.90 | 3 | | | | | |
| 1025 | Cadmium (ug/l) | <170.00 | 1.00 | 3.08 | 4.00 | 36 | | | | | |
| 915 | Calcium (mg/l) | 130.00 | 7.00 | 31.81 | 1.43 | 45 | 96.00 | 12.00 | 23.73 | 1.72 | 24 |
| 445 | Carbonate (mg/l) | 657.00 | <1.00 | 49.58 | 8.34 | 43 | | | | | |
| 940 | Chloride (mg/l) | 200.00 | 93.00 | 125.91 | 1.15 | 45 | 179.00 | 96.00 | 137.58 | 1.23 | 24 |
| 1030 | Chromium (ug/l) | 80.00 | <1.00 | 2.77 | 4.53 | 29 | | | | | |
| 340 | COD (mg/l) | 60.00 | 7.00 | 20.30 | 1.85 | 8 | | | | | |
| 31616 | Coliform, Fecal (Col/100 ml) | 1,400.00 | 0 | 66.84 | 102.73 | 8 | | | | | |
| 74050 | Coliform, Total (Col/100 ml) | 620.00 | 620.00 | -- | -- | 1 | | | | | |
| 80 | Color (PCU) | 80.00 | 2.00 | 11.87• | 2.41 | 34 | 35.00 | 2.50 | 21.34 | 2.03 | 24 |
| 95 | Conductivity, Spec. (umhos) | 5000.00 | 2410.00 | 3689.72 | 1.07 | 45 | | | | | |
| 1040 | Copper (ug/l) | <10.00 | <1.00 | <3.12 | 2.15 | 36 | | | | | |
| 720 | Cyanide (mg/l) | <0.01 | <0.01 | <0.01 | 1.00 | 26 | | | | | |
| 300 | Dissolved Oxygen (mg/l) | 12.60 | 5.60 | 9.59 | 1.27 | 41 | | | | | |
| 950 | Fluoride (mg/l) | 3.00 | 1.20 | 2.26 | 1.17 | 44 | 0.46 | <0.10 | 0.21 | 2.35 | 4 |
| 1120 | Gallium (ug/l) | <20.00 | <5.00 | <10.36 | 1.66 | 7 | | | | | |
| 1125 | Germanium(ug/l) | <70.00 | <20.00 | <33.85 | 1.81 | 7 | | | | | |
| 900 | Hardness (Ca,Mg) (mg/l) | 670.00 | 420.00 | 530.16 | 1.12 | 45 | 590.00 | 422.00 | 483.08 | 1.12 | 24 |
| 1046 | Iron (ug/l) | 660.00 | <8.00 | 25.64 | 2.38 | 43 | <20.00 | <20.00 | <20.00 | 1.00 | 4 |
| 625 | Kjeldahl Nitrogen (mg/l) | 2.60 | 0.17 | 0.75 | 1.56 | 22 | | | | | |
| 1049 | Lead (ug/l) | <50.00 | 1.00 | 2.14 | 3.02 | 36 | | | | | |
| 1130 | Lithium (ug/l) | 180.00 | 80.00 | 151.42 | 1.18 | 36 | | | | | |
| 925 | Magnesium (mg/l) | 140.00 | 50.00 | 108.24 | 1.16 | 45 | 130.00 | 9.60 | 87.43 | 1.98 | 24 |
| 1056 | Manganese (ug/l) | 250.00 | 10.00 | 12.25 | 1.53 | 40 | | | | | |
| 38260 | MBAS (mg/l) | 2.00 | 0.30 | 0.77 | 3.82 | 2 | | | | | |
| 71890 | Mercury (ug/l) | 0.90 | <0.01 | 0.02 | 3.31 | 34 | | | | | |
| 1060 | Molybdenum (ug/l) | 80.00 | 16.00 | 38.33 | 1.94 | 8 | | | | | |
| 1065 | Nickel (ug/l) | <50.00 | <10.00 | <24.78 | 1.93 | 7 | | | | | |
| 71851 | Nitrate ($NO_3$) (mg/l) | 12.00 | 0.04 | 4.80 | 2.93 | 22 | 2.30 | <0.20 | 0.40 | 2.54 | 24 |
| 71856 | Nitrite ($NO_2$) (mg/l) | 0.23 | <0.01 | 0.05 | 2.36 | 22 | 0.01 | 0.01 | 0.01 | 1.00 | 24 |
| 631 | Nitrite Plus Nitrate (N) (mg/l) | 2.70 | 0.01 | 0.41 | 5.54 | 45 | | | | | |
| 608 | Nitrogen, Ammonia (mg/l) | 0.40 | <0.01 | 0.04 | 4.17 | 34 | | | | | |
| 607 | Nitrogen, Organic (mg/l) | 0.99 | 0.31 | 0.57 | 1.53 | 10 | | | | | |
| 1330 | Odor (Severity) | 3.00 | 0 | 0 | 7.35 | 43 | 0 | 0 | 0 | 1.0 | 24 |
| 550 | Oil & Grease (mg/l) | 17.00 | <0.10 | 0.66 | 5.91 | 24 | | | | | |
| | Organic Carbon (mg/l) | | | | | | | | | | |
| 681 | Dissolved | 43.00 | 4.30 | 8.97 | 1.68 | 12 | 230.00 | <1.0 | 29.64 | 6.42 | 48 |
| 689 | Suspended | 2.40 | 0.02 | 0.78 | 2.24 | 8 | | | | | |
| 680 | Total | 29.00 | 4.70 | 11.20 | 2.21 | 4 | | | | | |
| | Pesticides (ug/l) | 0 | 0 | 0 | 1.0 | 6 | | | | | |
| 400 | pH* | 10.10 | 8.00 | 8.55 | 0.20 | 44 | | | | | |
| 32730 | Phenols (mg/l) | 1.00 | 0 | 0.03 | 132.23 | 2 | | | | | |
| | Phosphate (mg/l) | | | | | | | | | | |
| 660 | Dissolved ($PO_4$) | 5.50 | <0.01 | 0.06 | 4.20 | 45 | 0.05 | <0.01 | 0.01 | 1.58 | 24 |
| 671 | Ortho (P) | 1.80 | 0.01 | 0.03 | 3.06 | 45 | | | | | |
| 665 | Total (P) | 0.79 | 0.01 | 0.07 | 3.71 | 33 | 0.23 | 0.01 | 0.03 | 2.07 | 24 |
| 935 | Potassium (mg/l) | 7.40 | 3.50 | 4.14 | 1.17 | 45 | 7.40 | 5.00 | 6.54 | 1.07 | 24 |
| | Radioactivity | | | | | | | | | | |
| | Gross Alpha (pc/l)# | 46.24 | <16.32 | 24.53 | 1.51 | 6 | | | | | |
| 9511 | Radium 226 (pc/l) | 0.12 | 0.12 | | | 1 | | | | | |
| 80030 | Natural Uranium (ug/l) | 68.00 | <24.00 | 36.07 | 1.51 | 6 | | | | | |
| | Gross Beta (pc/l) | | | | | | | | | | |
| 80050 | $SR^{90}$ (pc/l) | 36.00 | <6.20 | 11.76 | 1.86 | 6 | | | | | |
| 3515 | $CE^{137}$ (pc/l) | 45.00 | <7.70 | 13.97 | 1.90 | 6 | | | | | |
| 1145 | Selenium (ug/l) | 3.00 | <1.00 | 1.90 | 1.53 | 34 | | | | | |
| 955 | Silica ($SiO_2$) (mg/l) | 20.00 | 0.30 | 10.34 | 1.68 | 45 | 16.05 | 0.09 | 8.66 | 1.62 | 24 |
| 1075 | Silver (ug/l) | <5.00 | <2.00 | <2.96 | 1.63 | 7 | | | | | |
| 930 | Sodium (mg/l) | 940.00 | 500.00 | 778.28 | 1.12 | 45 | 920.00 | 640.00 | 824.39 | 1.10 | 24 |
| 931 | Sodium Adsorption Ratio | 19.00 | 9.40 | 14.53 | 1.15 | 45 | | | | | |
| 70301 | Solids, Dissolved (mg/l) | 2870.00 | 1740.00 | 2512.67 | 1.08 | 43 | 2780.99 | 2099.99 | 2492.88 | 1.09 | 24 |
| 1080 | Strontium (ug/l) | 3600.00 | 2700.00 | 3222.30 | 1.10 | 11 | | | | | |
| 945 | Sulfate (mg/l) | 750.00 | 400.00 | 556.14 | 1.11 | 45 | 1410.36 | 404.24 | 532.64 | 1.12 | 24 |
| 746 | Sulfide (mg/l) | 0.60 | <0.01 | 0.05 | 4.80 | 27 | | | | | |
| 10 | Temperature (°C)* | 28.00 | 0 | 12.29 | 11.02 | 45 | | | | | |
| 1100 | Tin (ug/l) | <50.00 | <15.00 | <27.77 | 1.75 | 7 | | | | | |
| 1150 | Titanium (ug/l) | <30.00 | <8.00 | <15.02 | 1.73 | 7 | | | | | |
| 70 | Turbidity (JTU) | 400.00 | 3.00 | 48.45 | 5.76 | 23 | 110.00 | 3.00 | 22.55 | 3.16 | 24 |
| 1085 | Vanadium (ug/l) | <50.00 | <8.00 | <20.06 | 2.12 | 7 | | | | | |
| 1090 | Zinc (ug/l) | 140.00 | 2.00 | 12.72 | 2.08 | 36 | | | | | |
| 1160 | Zirconium (ug/l) | <100.00 | <25.00 | <49.99 | 1.95 | 7 | | | | | |

* Normal mean and standard deviation. # Calculated from Gross Alpha as Natural Uranium.

## TABLE 25

## BASELINE SURFACE WATER QUALITY SUMMARY
## CORRAL GULCH EAST OF TRACT C-a

| Param. No. | Item | USGS Data High | Low | Geo. Mean | Geo. Dev. | No. of Analy. | NUS DATA High | Low | Geo. Mean | Geo. Dev. | No. of Analy |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 410 | Alkalinity (mg/l) | 739.00 | 268.00 | 403.86 | 1.08 | 58 | | | | | |
| 1106 | Aluminum (ug/l) | 100.00 | 10.00 | 24.28 | 2.12 | 11 | | | | | |
| 71846 | Ammonia ($NH_4$) (mg/l) | 0.35 | 0.01 | 0.03 | 3.07 | 30 | < 0.10 | < 0.01 | < 0.09 | 1.60 | 24 |
| 1000 | Arsenic (ug/l) | 14.00 | 1.00 | 5.33 | 1.29 | 50 | | | | | |
| 1005 | Barium (ug/l) | < 200.00 | < 50.00 | <74.09 | 1.81 | 45 | | | | | |
| 1010 | Beryllium (ug/l) | < 7.00 | < 2.00 | < 3.32 | 1.67 | 7 | | | | | |
| 440 | Bicarbonate (mg/l) | 901.00 | 327.00 | 492.00 | 1.08 | 58 | | | | | |
| 1015 | Bismuth (ug/l) | < 25.00 | < 5.00 | < 10.38 | 1.92 | 7 | | | | | |
| 310 | BOD (mg/l) | 2.60 | 2.00 | 2.25 | 1.14 | 3 | | | | | |
| 1020 | Boron (ug/l) | 670.00 | 60.00 | 116.78 | 1.22 | 53 | | | | | |
| 71870 | Bromide (mg/l) | 0.10 | 0.10 | 0.10 | 1.0 | 3 | | | | | |
| 1025 | Cadmium (ug/l) | < 60.00 | 1.00 | 3.39 | 3.33 | 48 | | | | | |
| 915 | Calcium (mg/l) | 110.00 | 55.00 | 85.56 | 1.07 | 58 | 88.00 | 54.00 | 78.91 | 1.13 | 24 |
| 445 | Carbonate (mg/l) | 0 | 0 | 0 | 1.00 | 49 | | | | | |
| 940 | Chloride (mg/l) | 19.00 | 5.90 | 9.78 | 1.18 | 58 | 25.00 | 8.00 | 10.41 | 1.25 | 24 |
| 1030 | Chromium (ug/l) | 50.00 | < 1.00 | 2.79 | 3.51 | 27 | | | | | |
| 340 | COD (mg/l) | 94.00 | 5.00 | 13.61 | 2.60 | 8 | | | | | |
| 31616 | Coliform, Fecal (Col/100 ml) | 220.00 | 0 | 2.07 | 89.66 | 6 | | | | | |
| 74050 | Coliform, Total (Col/100 ml) | 580.00 | 180.00 | 323.11 | 2.29 | 2 | | | | | |
| 80 | Color (PCU) | 17.00 | 0 | 4.51 | 2.22 | 32 | 25.00 | 2.50 | 10.52 | 2.41 | 24 |
| 95 | Conductivity, Spec. (umhos) | 1725.00 | 797.00 | 1231.54 | 1.07 | 59 | | | | | |
| 1040 | Copper (ug/l) | 13.00 | 1.00 | 2.15 | 3.02 | 46 | | | | | |
| 720 | Cyanide (mg/l) | 0.02 | < 0.01 | 0.01 | 1.21 | 25 | | | | | |
| 300 | Dissolved Oxygen (mg/l) | 13.00 | 4.80 | 8.32 | 1.25 | 53 | | | | | |
| 950 | Fluoride (mg/l) | 10.00 | 0.20 | 0.49 | 2.02 | 58 | 0.40 | 0.40 | 0.40 | 1.00 | 4 |
| 1120 | Gallium (ug/l) | < 8.00 | < 2.00 | < 4.58 | 1.73 | 7 | | | | | |
| 1125 | Germanium(ug/l) | < 40.00 | < 6.00 | < 12.39 | 2.13 | 7 | | | | | |
| 900 | Hardness (Ca,Mg) (mg/l) | 520.00 | 360.00 | 476.06 | 1.08 | 58 | 508.00 | 358.00 | 445.00 | 1.10 | 24 |
| 1046 | Iron (ug/l) | 240.00 | 10.00 | 31.25 | 2.35 | 55 | <20.00 | <20.00 | <20.00 | 1.00 | 4 |
| 625 | Kjeldahl Nitrogen (mg/l) | 2.40 | 0.14 | 0.42 | 2.09 | 21 | | | | | |
| 1049 | Lead (ug/l) | 18.00 | < 1.00 | 1.90 | 2.09 | 46 | | | | | |
| 1130 | Lithium (ug/l) | 40.00 | < 5.00 | 11.59 | 2.35 | 46 | | | | | |
| 925 | Magnesium (mg/l) | 71.00 | 45.00 | 62.04 | 1.10 | 58 | 80.00 | 43.00 | 59.90 | 1.17 | 24 |
| 1056 | Manganese (ug/l) | 70.00 | 5.00 | 16.83 | 1.99 | 52 | | | | | |
| 38260 | MBAS (mg/l) | 3.00 | 0.10 | .55 | 11.08 | 2 | | | | | |
| 71890 | Mercury (ug/l) | 1.30 | < 0.01 | 0.02 | 3.50 | 46 | | | | | |
| 1060 | Molybdenum (ug/l) | 56.00 | 23.00 | 37.55 | 1.40 | 8 | | | | | |
| 1065 | Nickel (ug/l) | < 20.00 | < 4.00 | < 8.59 | 1.92 | 7 | | | | | |
| 71851 | Nitrate ($NO_3$) (mg/l) | 3.00 | 0.93 | 1.22 | 1.14 | 20 | 1.00 | 0.20 | 0.28 | 1.75 | 24 |
| 71856 | Nitrite ($NO_2$) (mg/l) | 0.10 | < 0.01 | 0.02 | 2.86 | 21 | 0.02 | < 0.01 | 0.01 | 1.15 | 24 |
| 631 | Nitrite Plus Nitrate (N) (mg/l) | 2.00 | 0.02 | 0.32 | 1.59 | 58 | | | | | |
| 608 | Nitrogen, Ammonia (mg/l) | 0.27 | 0.01 | 0.03 | 2.76 | 31 | | | | | |
| 607 | Nitrogen, Organic (mg/l) | 0.89 | 0.07 | 0.29 | 1.99 | 9 | | | | | |
| 1330 | Odor (Severity) | 3.00 | 0 | 0 | 8.31 | 57 | 0 | 0 | 0 | 1.0 | 24 |
| 550 | Oil & Grease (mg/l) | 16.00 | < 0.10 | 2.90 | 3.04 | 24 | | | | | |
| | Organic Carbon (mg/l) | | | | | | | | | | |
| 681 | Dissolved | 14.00 | 1.70 | 8.12 | 1.73 | 10 | 91.00 | < 1.00 | 12.41 | 2.52 | 48 |
| 689 | Suspended | 8.70 | 0.30 | 0.36 | 1.40 | 10 | | | | | |
| 680 | Total | 15.00 | 9.80 | 11.37 | 1.27 | 3 | | | | | |
| | Pesticides (ug/l) | 0 | 0 | 0 | 1.00 | 6 | | | | | |
| 400 | pH* | 8.90 | 7.10 | 7.88 | 0.31 | 58 | | | | | |
| 32730 | Phenols (mg/l) | 3.00 | 0 | 0.05 | 287.50 | 2 | | | | | |
| | Phosphate (mg/l) | | | | | | | | | | |
| 660 | Dissolved ($PO_4$) | 0.40 | < 0.01 | 0.06 | 2.11 | 58 | 0.04 | 0.01 | 0.03 | 1.46 | 24 |
| 671 | Ortho (P) | 0.13 | < 0.01 | 0.02 | 2.06 | 58 | | | | | |
| 665 | Total (P) | 0.06 | 0.01 | 0.03 | 2.02 | 31 | 2.10 | 0.03 | 0.04 | 1.55 | 24 |
| 935 | Potassium (mg/l) | 3.00 | 0.70 | 1.59 | 1.22 | 58 | 4.40 | 1.70 | 2.18 | 1.19 | 24 |
| | Radioactivity | | | | | | | | | | |
| | Gross Alpha (pc/l) # | <8.84 | <4.56 | < 6.60 | 1.29 | 7 | | | | | |
| 9511 | Radium 226 (pc/l) | 0.10 | 0.05 | 0.07 | 1.34 | 4 | | | | | |
| 80030 | Natural Uranium (ug/l) | < 13.00 | < 6.70 | < 9.70 | 1.29 | 7 | | | | | |
| | Gross Beta (pc/l) | | | | | | | | | | |
| 80050 | $SR^{90}$ (pc/l) | 7.50 | 2.00 | 3.10 | 1.59 | 7 | | | | | |
| 3515 | $CE^{137}$ (pc/l) | 9.40 | 2.40 | 3.83 | 1.61 | 7 | | | | | |
| 1145 | Selenium (ug/l | 8.00 | 1.00 | 2.96 | 1.39 | 45 | | | | | |
| 955 | Silica ($SiO_2$) (mg/l) | 24.00 | 13.00 | 21.10 | 1.07 | 58 | 21.83 | 9.20 | 18.28 | 1.30 | 24 |
| 1075 | Silver (ug/l) | < 2.00 | < 1.00 | < 1.49 | 1.45 | 7 | | | | | |
| 930 | Sodium (mg/l) | 300.00 | 51.00 | 109.15 | 1.10 | 58 | 350.00 | 91.00 | 108.98 | 1.15 | 24 |
| 931 | Sodium Adsorption Ratio | 6.80 | 1.20 | 2.15 | 1.10 | 58 | | | | | |
| 70301 | Solids, Dissolved (mg/l) | 1140.00 | 522.00 | 822.87 | 1.07 | 57 | 1200.00 | 691.00 | 810.23 | 1.06 | 24 |
| 1080 | Strontium (ug/l) | 2000.00 | 1300.00 | 1685.55 | 1.15 | 11 | | | | | |
| 945 | Sulfate (mg/l) | 360.00 | 160.00 | 288.77 | 1.10 | 58 | 299.44 | 179.66 | 259.62 | 1.10 | 24 |
| 746 | Sulfide (mg/l) | 0.80 | < 0.01 | 0.06 | 5.17 | 25 | | | | | |
| 10 | Temperature (°C)* | 22.00 | 3.00 | 11.47 | 4.12 | 65 | | | | | |
| 1100 | Tin (ug/l) | < 20.00 | < 5.00 | < 9.65 | 1.75 | 7 | | | | | |
| 1150 | Titanium (ug/l) | < 10.00 | < 3.00 | < 6.02 | 1.67 | 7 | | | | | |
| 70 | Turbidity (JTU) | 1000.00 | 1.0 | 8.23 | 8.94 | 21 | 1000.00 | 0.30 | 1.79 | 5.41 | 24 |
| 1085 | Vanadium (ug/l) | < 16.00 | 3.00 | 6.83 | 1.97 | 7 | | | | | |
| 1090 | Zinc (ug/l) | 100.00 | 4.00 | 12.47 | 2.05 | 46 | | | | | |
| 1160 | Zirconium (ug/l) | < 40.00 | < 9.00 | < 18.35 | 1.86 | 7 | | | | | |

* Normal mean and standard deviation # Calculated from Gross Alpha as Natural Uranium

nitrite, dissolved organic carbon, and selenium. Again, it should be noted that all the constituents were within the limits established during the baseline period.

Continuous conductivity, temperature, and flow data were collected at each of the seven surface water gaging stations used to collect the baseline data for Tract C-a during the interim monitoring period. Data received to date from the USGS (Appendix L) indicate that five of the seven stations had recorded flows during the period. These stations are Dry Fork, Corral Gulch near the West Boundary of Tract C-a, Box Elder Gulch, Corral Gulch East of Tract C-a, and Yellow Creek near the confluence of the White River. As indicated on Figures 17 through 21 , which show the flows for each of these stations during the 1977 water year, only Corral Gulch East of Tract C-a and Yellow Creek had perennial flows. Corral Gulch near the western tract boundary had small flows during the months of October and November 1976, and February March and July 1977. Both Dry Fork and Box Elder Gulch Stations only recorded flow during July, after a major thunderstorm in the vicinity of Tract C-a.

The flows associated with the gaging stations during the interim period were anomalous when compared with the previous two years of baseline data (see Figures 22 to 29 for continuous flows of the Yellow Creek and Corral Gulch East stations during 1975 and 1976) in that there was not any spring snowmelt runoff during the spring of 1977. This lack of runoff is to be expected due to the lack of snow accumulation in the Cathedral Bluffs area during the winter of 1976-1977.

The mean continuous temperature data are presented on Figures 30 and 31 for Corral Gulch East of Tract C-a and Yellow Creek near the White River gaging stations, respectively. A comparison of the data presented on these Figures with the previous two years of baseline as shown on Figures 32 through 35 , indicates the temperature during the interim period was similar to that during the previous two years of baseline data.

The continuous mean conductivity data for these two stations indicates, as shown on Figures 36 and 37 that the conductivity was much more stable than that

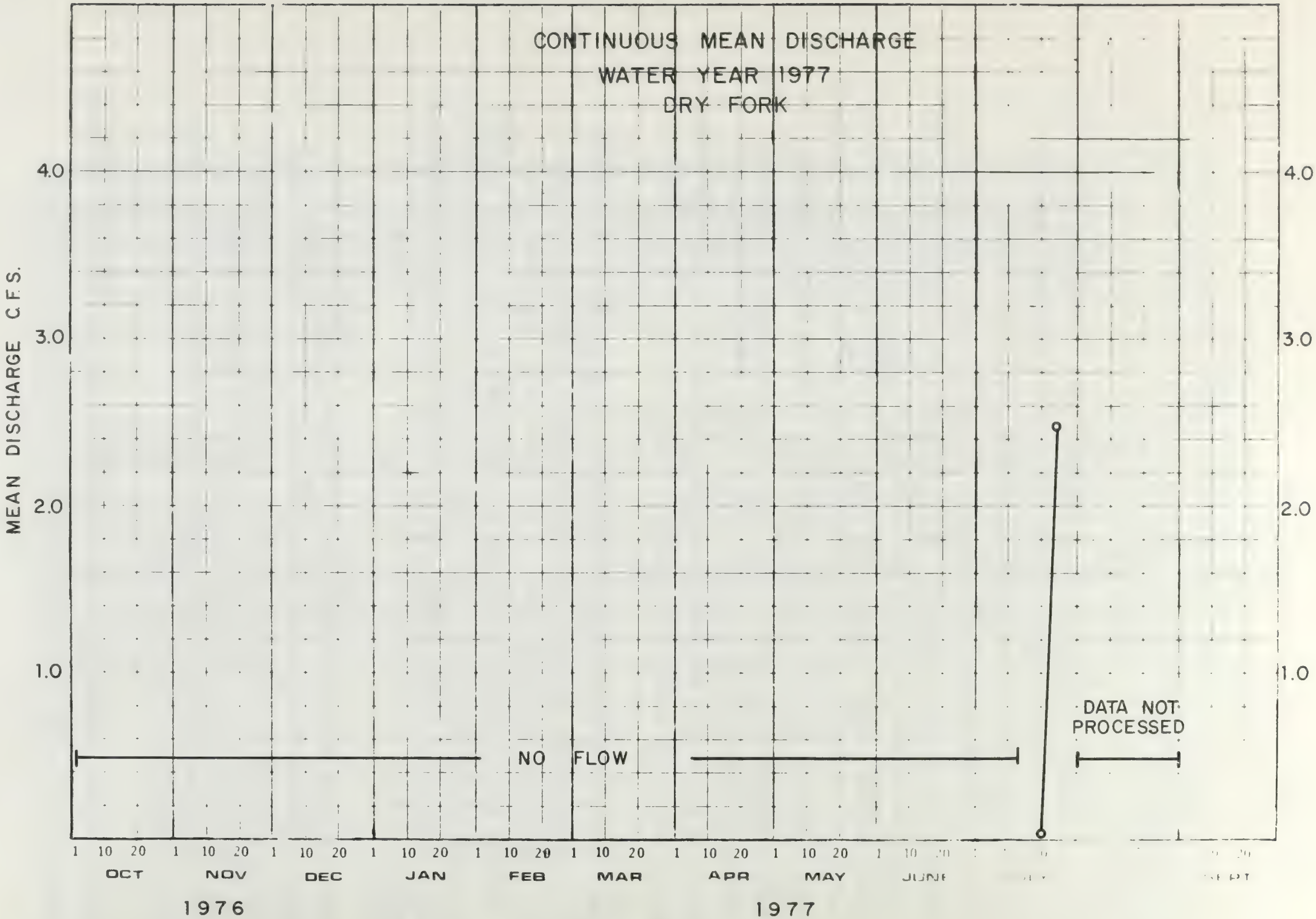



FIGURE 17

CONTINUOUS MEAN DISCHARGE WATER YEAR 1977 DRY FORK

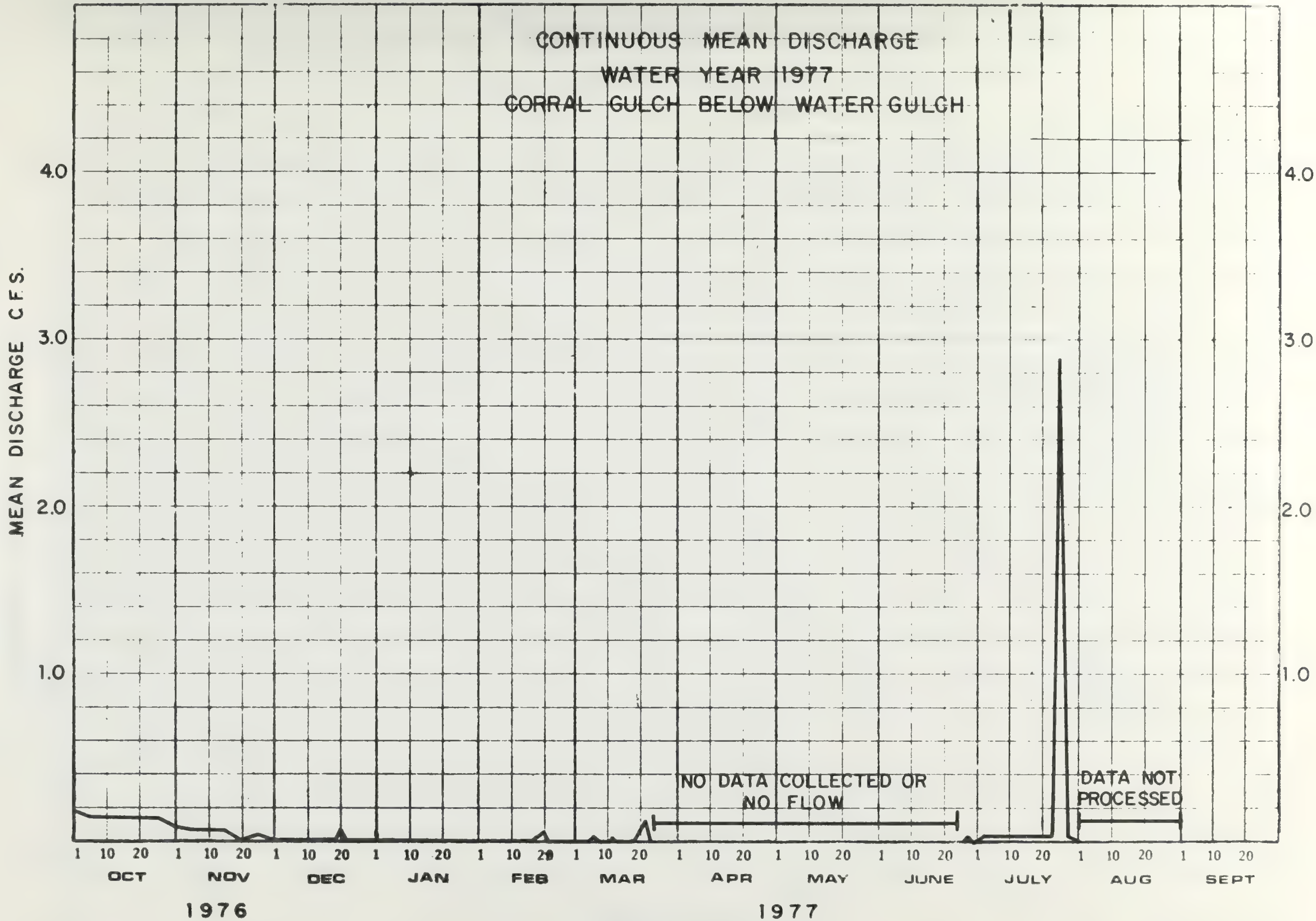



FIGURE 18

CONTINUOUS MEAN DISCHARGE WATER YEAR 1977 CORRAL GULCH BELOW WATER GULCH

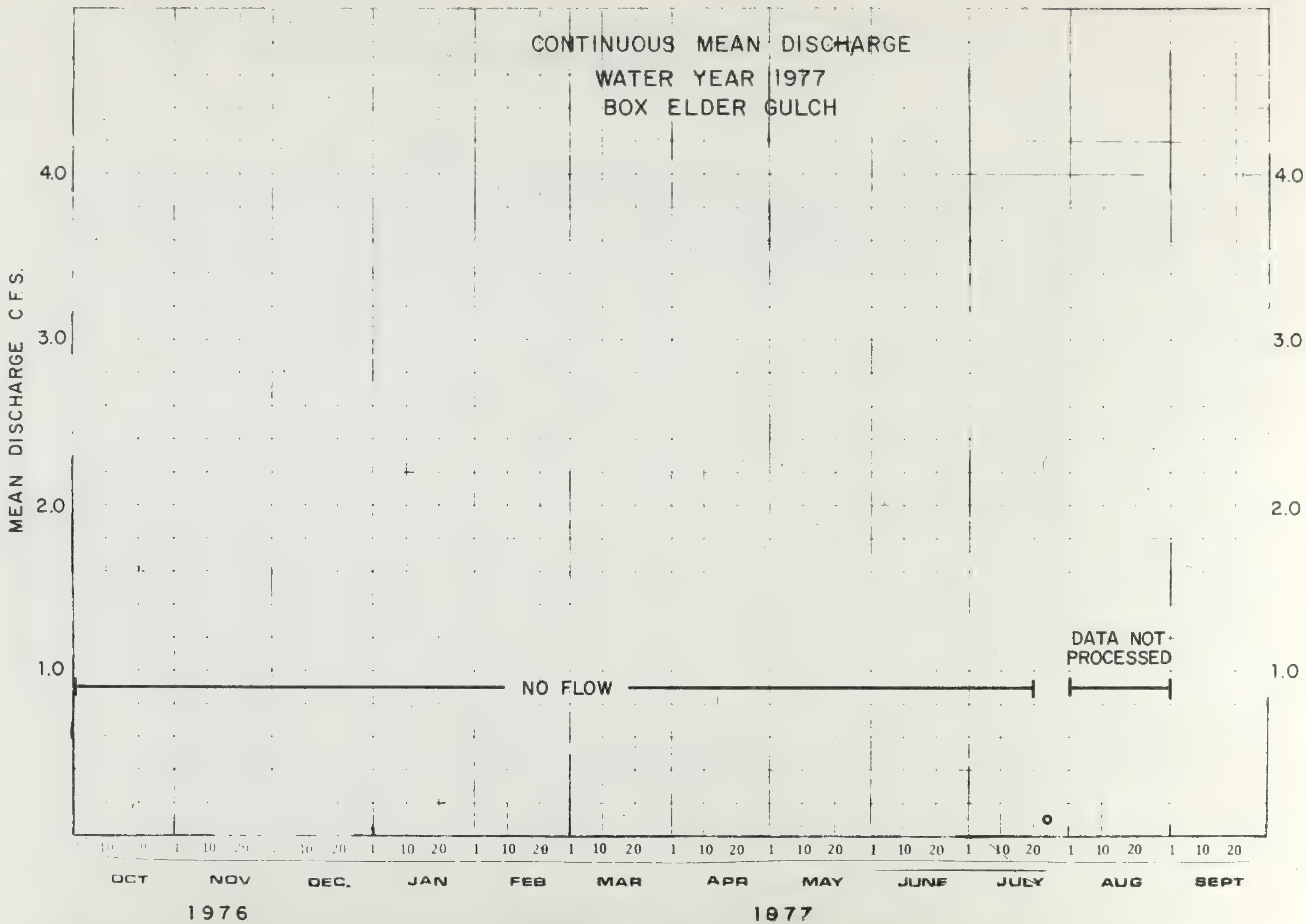



FIGURE 19

CONTINUOUS MEAN DISCHARGE WATER YEAR 1977 BOX ELDER GULCH

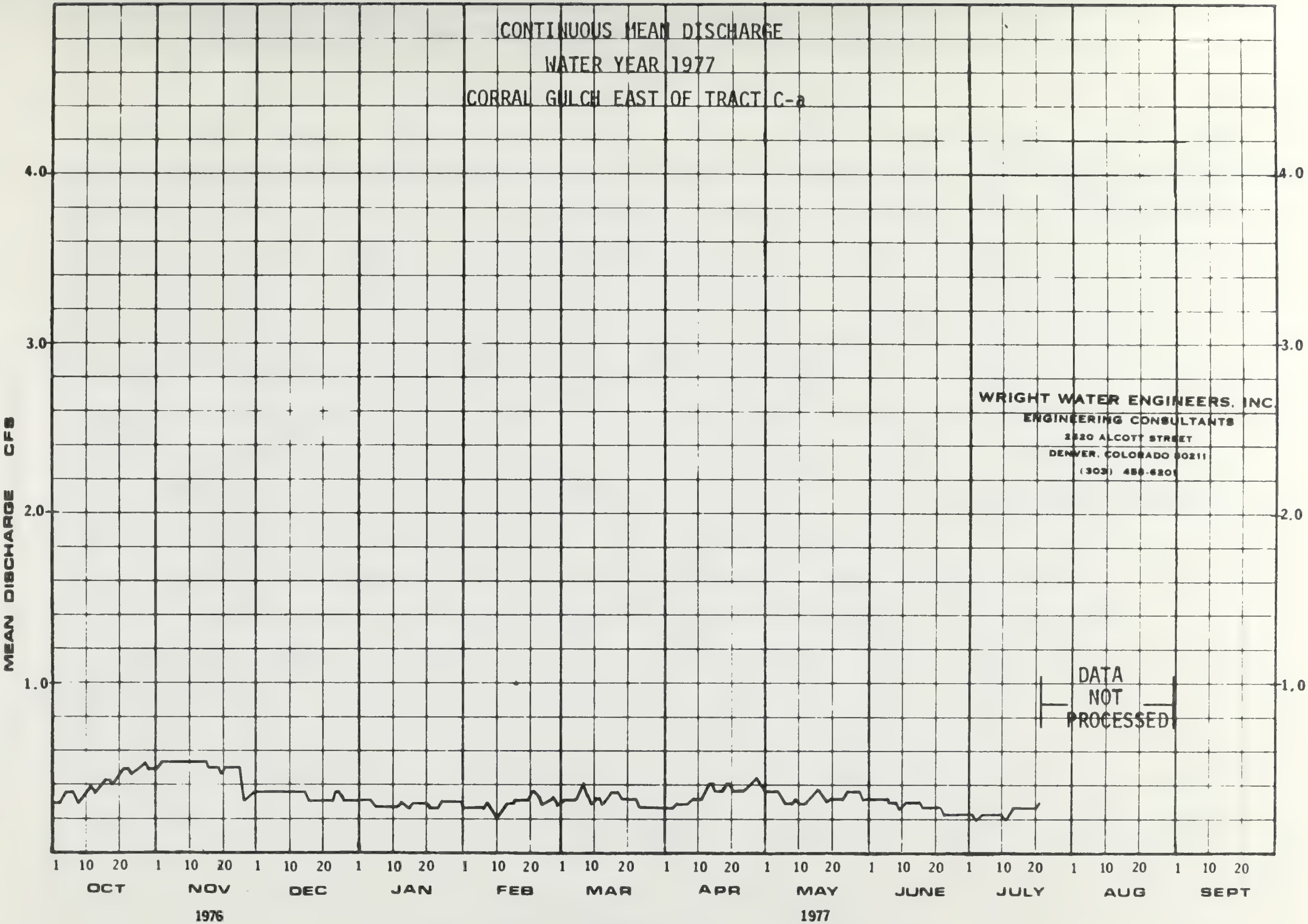



FIGURE 20

CONTINUOUS MEAN DISCHARGE WATER YEAR 1977 CORRAL GULCH EAST OF TRACT C-a

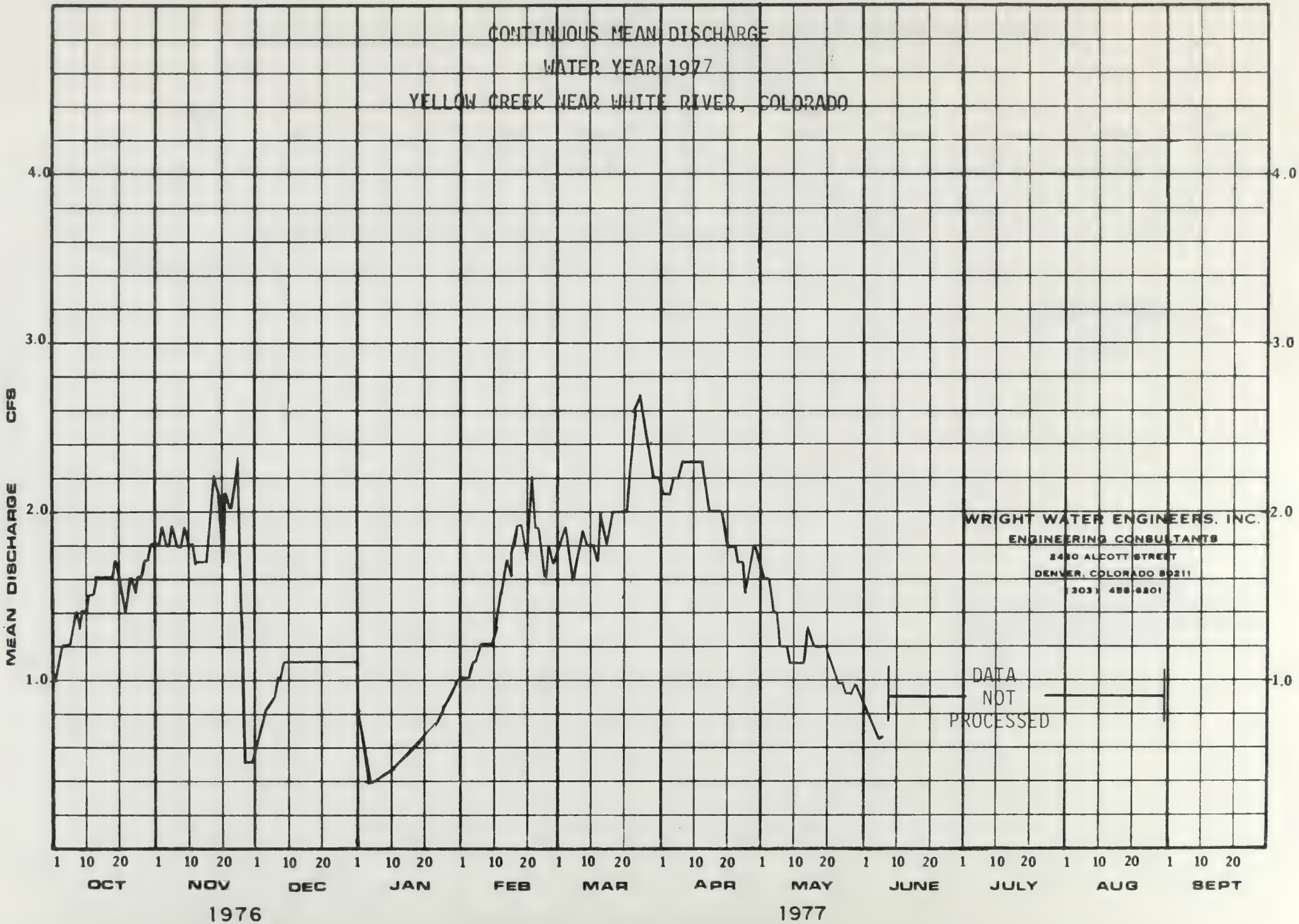



FIGURE 21

CONTINUOUS MEAN DISCHARGE WATER YEAR 1977 YELLOW CREEK NEAR WHITE RIVER, COLORADO

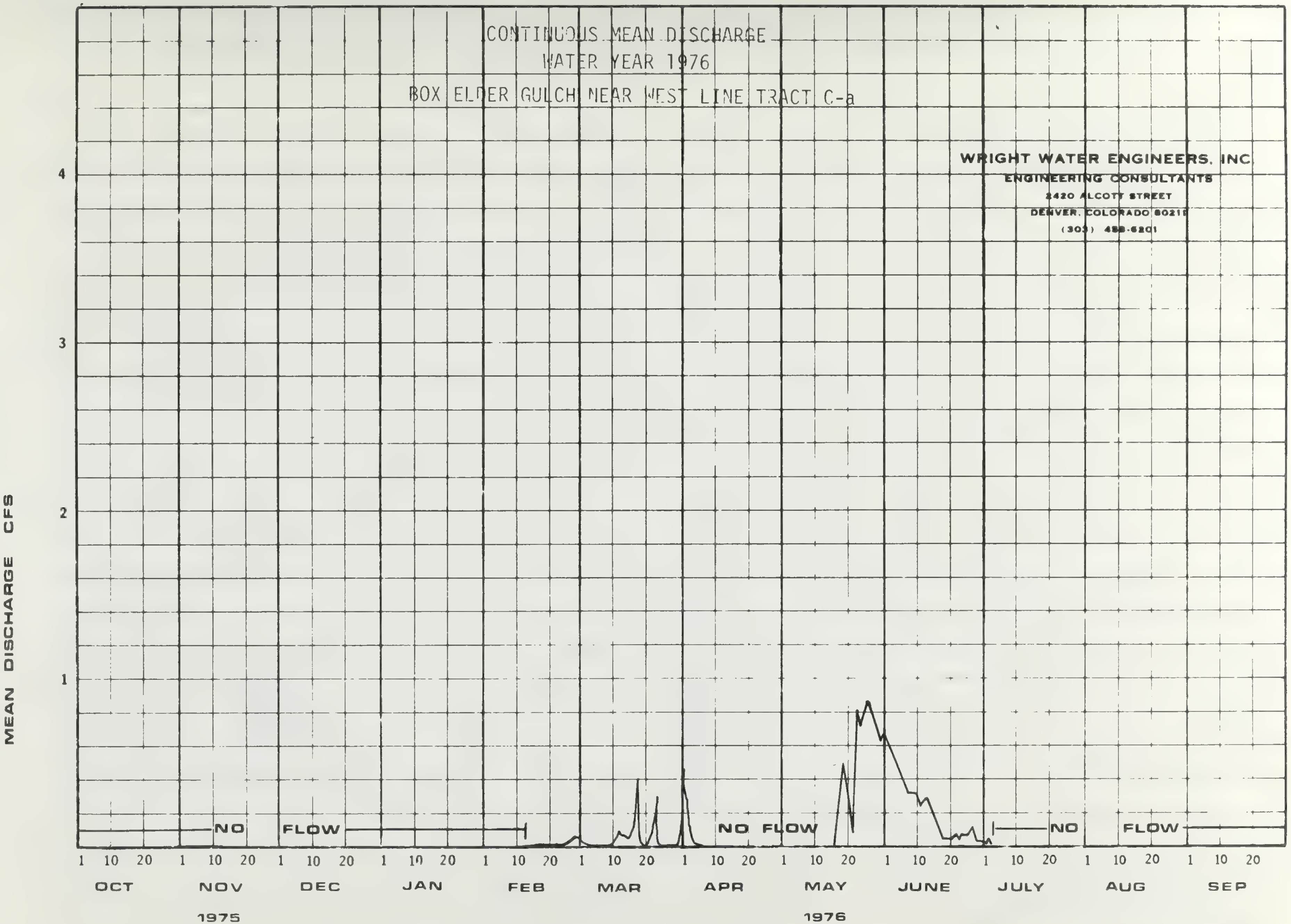



FIGURE 22

CONTINUOUS MEAN DISCHARGE WATER YEAR 1976 BOX ELDER GULCH NEAR WEST LINE TRACT C-a

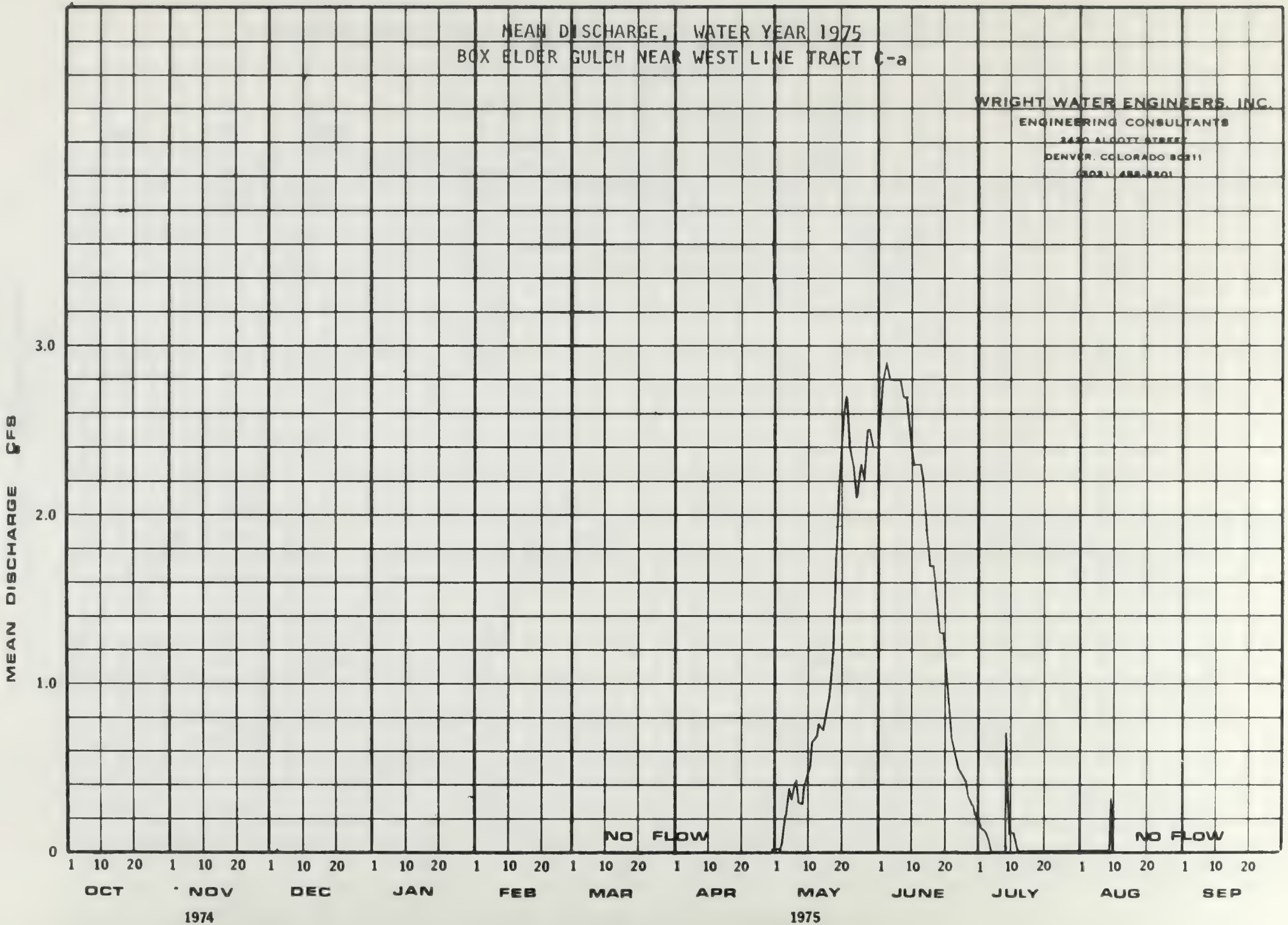



FIGURE 23

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1975 BOX ELDER GULCH NEAR WEST LINE TRACT C-a

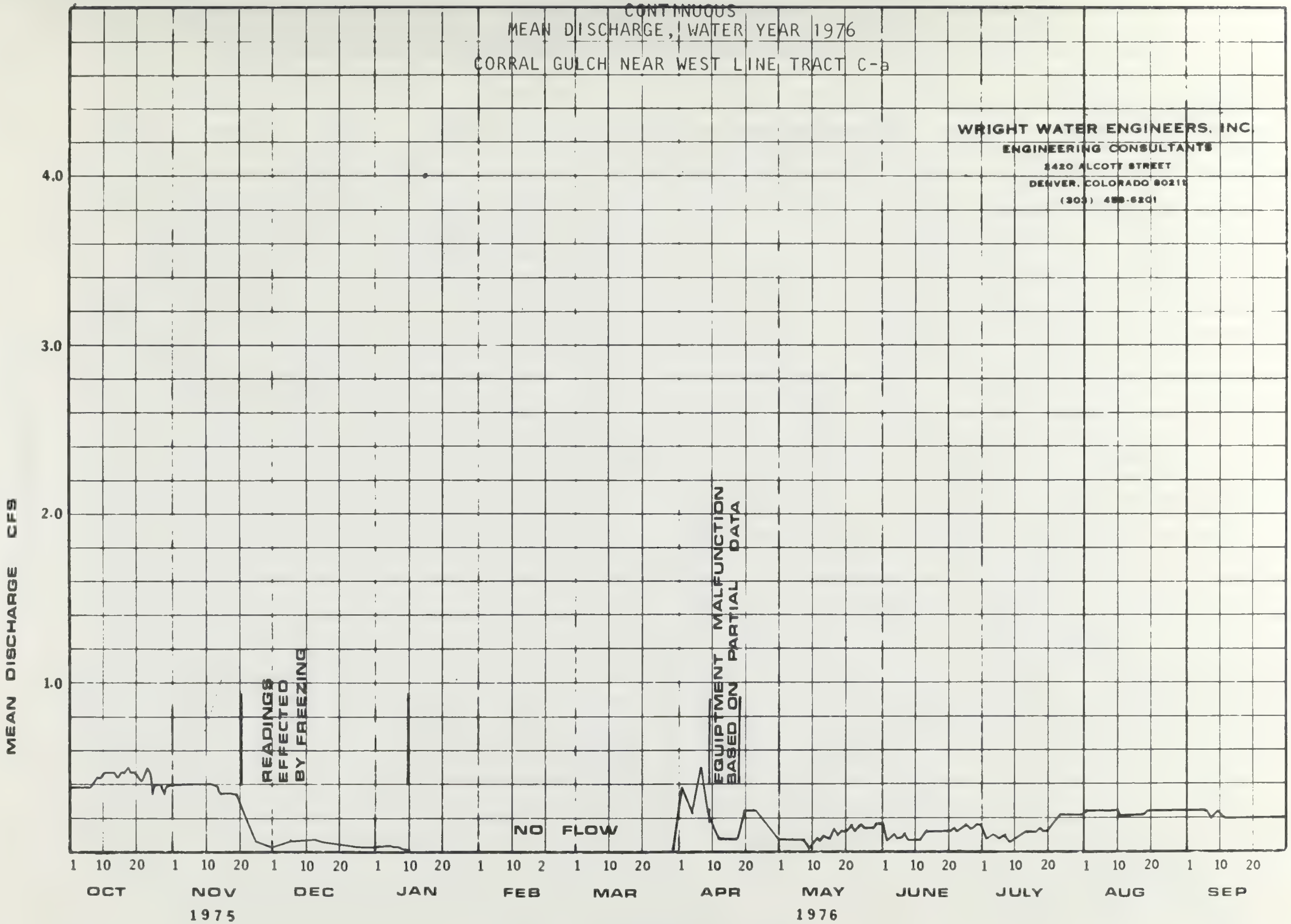



FIGURE 24

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1976 CORRAL GULCH NEAR WEST LINE TRACT C-a

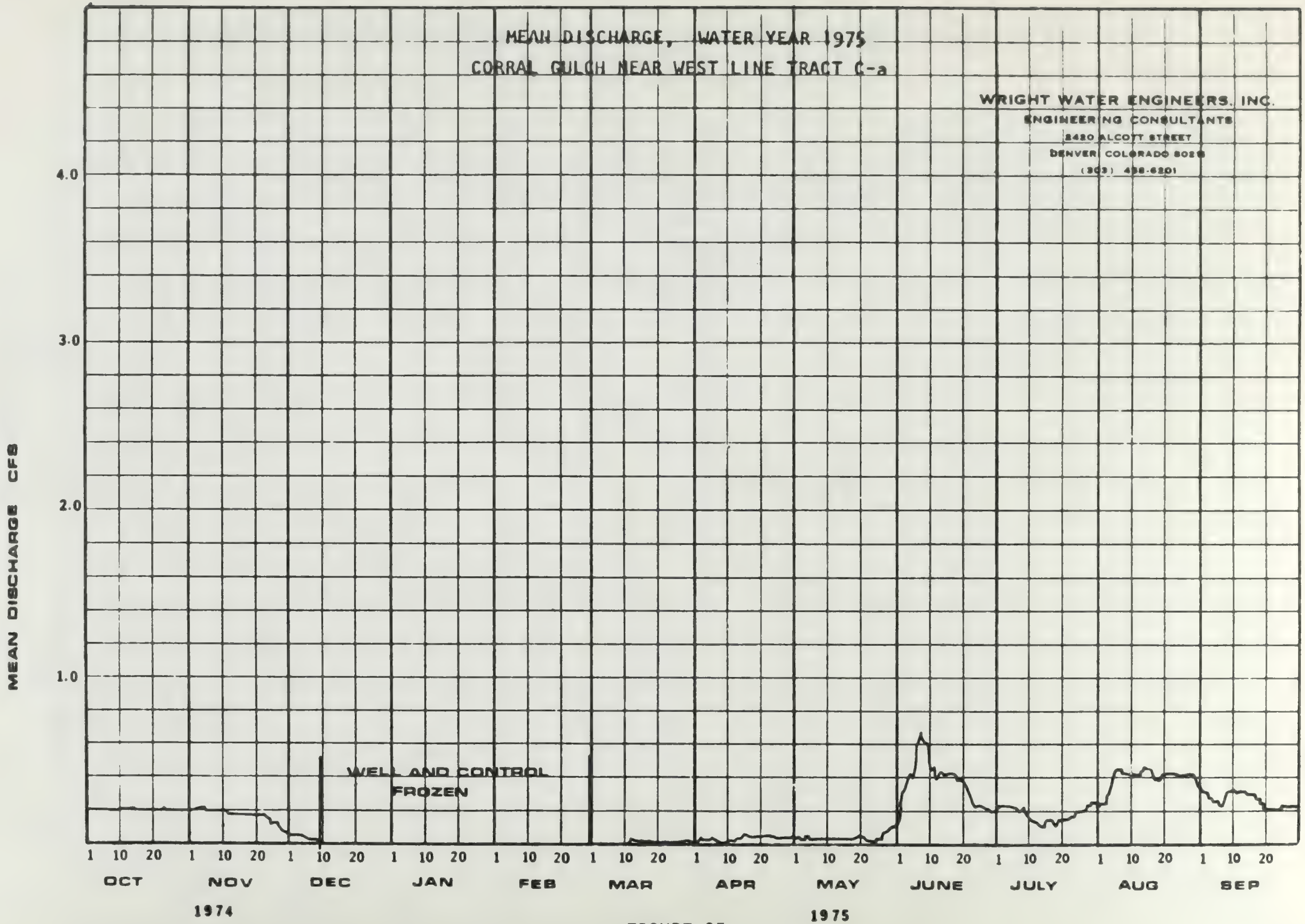



FIGURE 25

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1975 CORRAL GULCH NEAR WEST LINE TRACT C-a

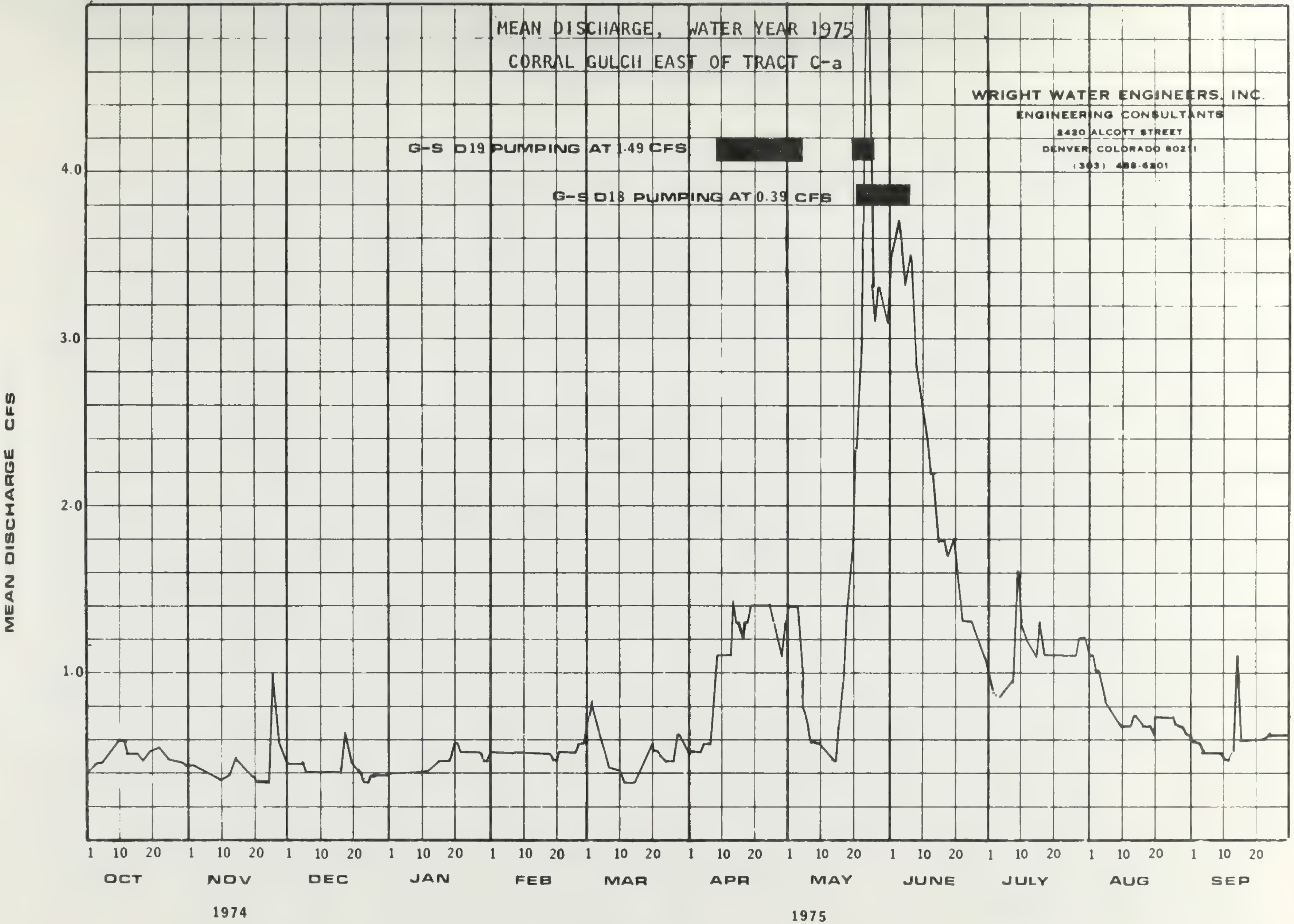



FIGURE 26

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1975 CORRAL GULCH EAST OF TRACT C-a

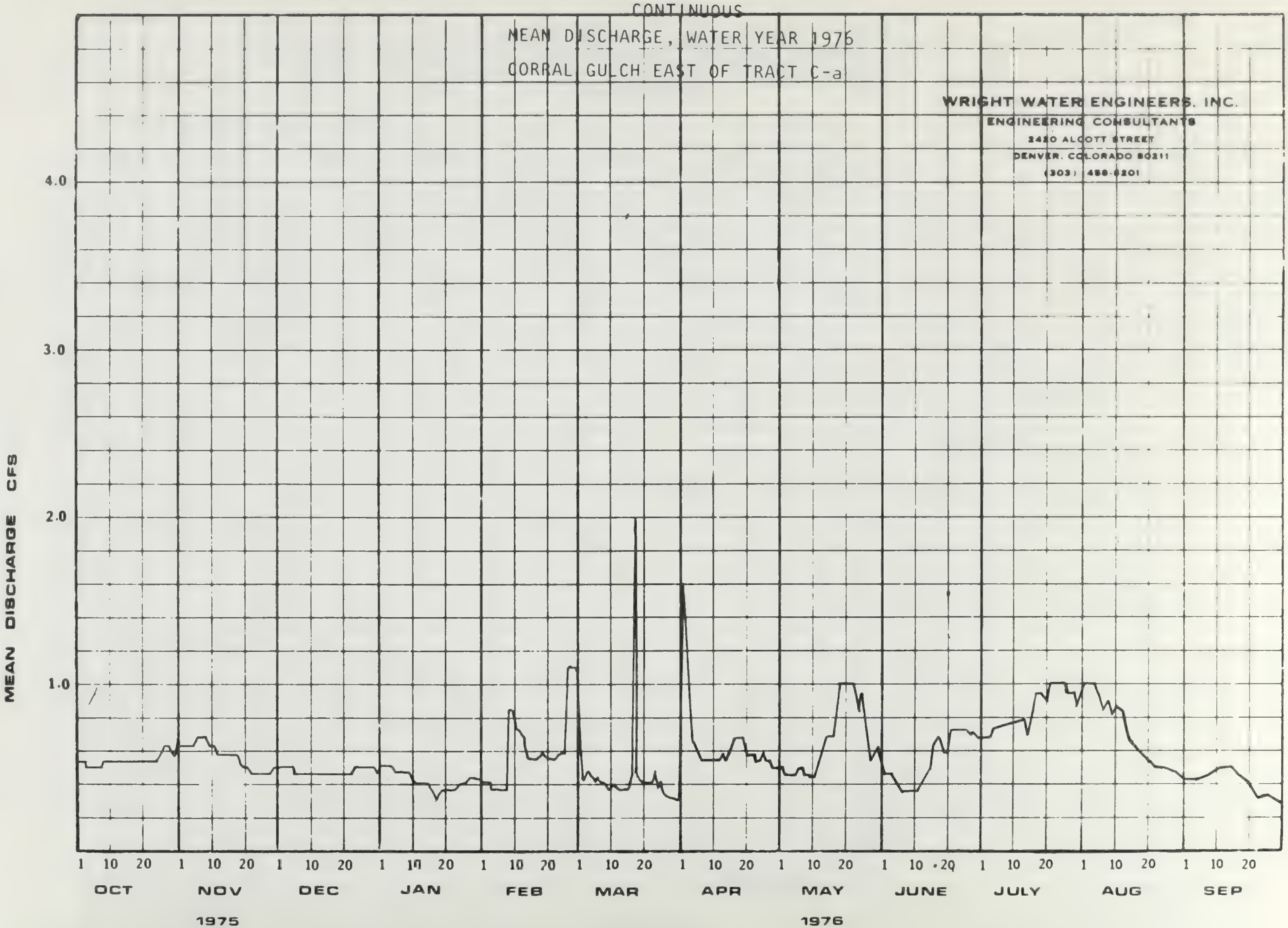



FIGURE 27

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1976 CORRAL GULCH EAST OF TRACT C-a

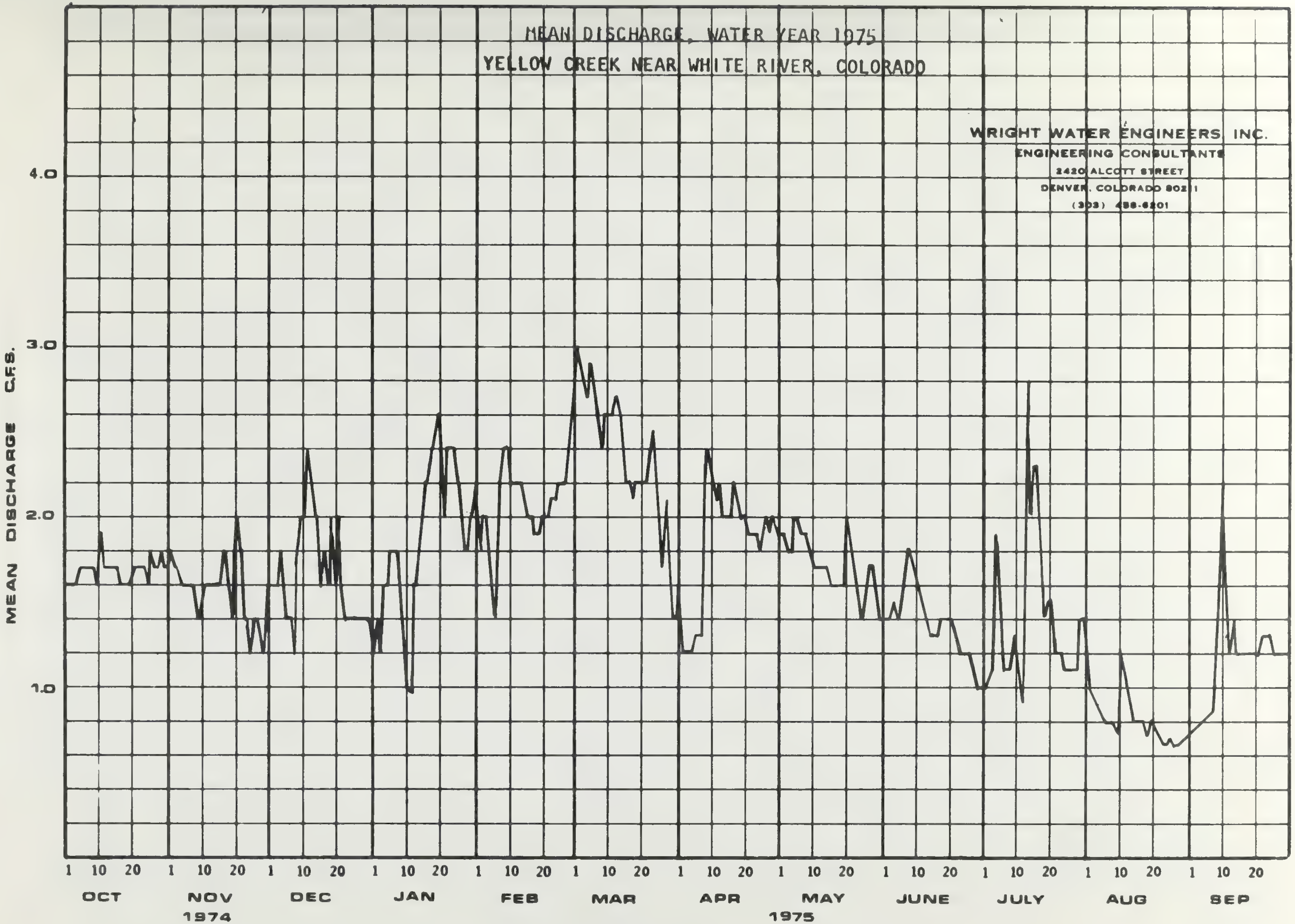



FIGURE 28

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1975 YELLOW CREEK NEAR WHITE RIVER, COLORADO


FIGURE 29

CONTINUOUS MEAN DISCHARGE, WATER YEAR 1976 YELLOW CREEK NEAR WHITE RIVER, COLORADO

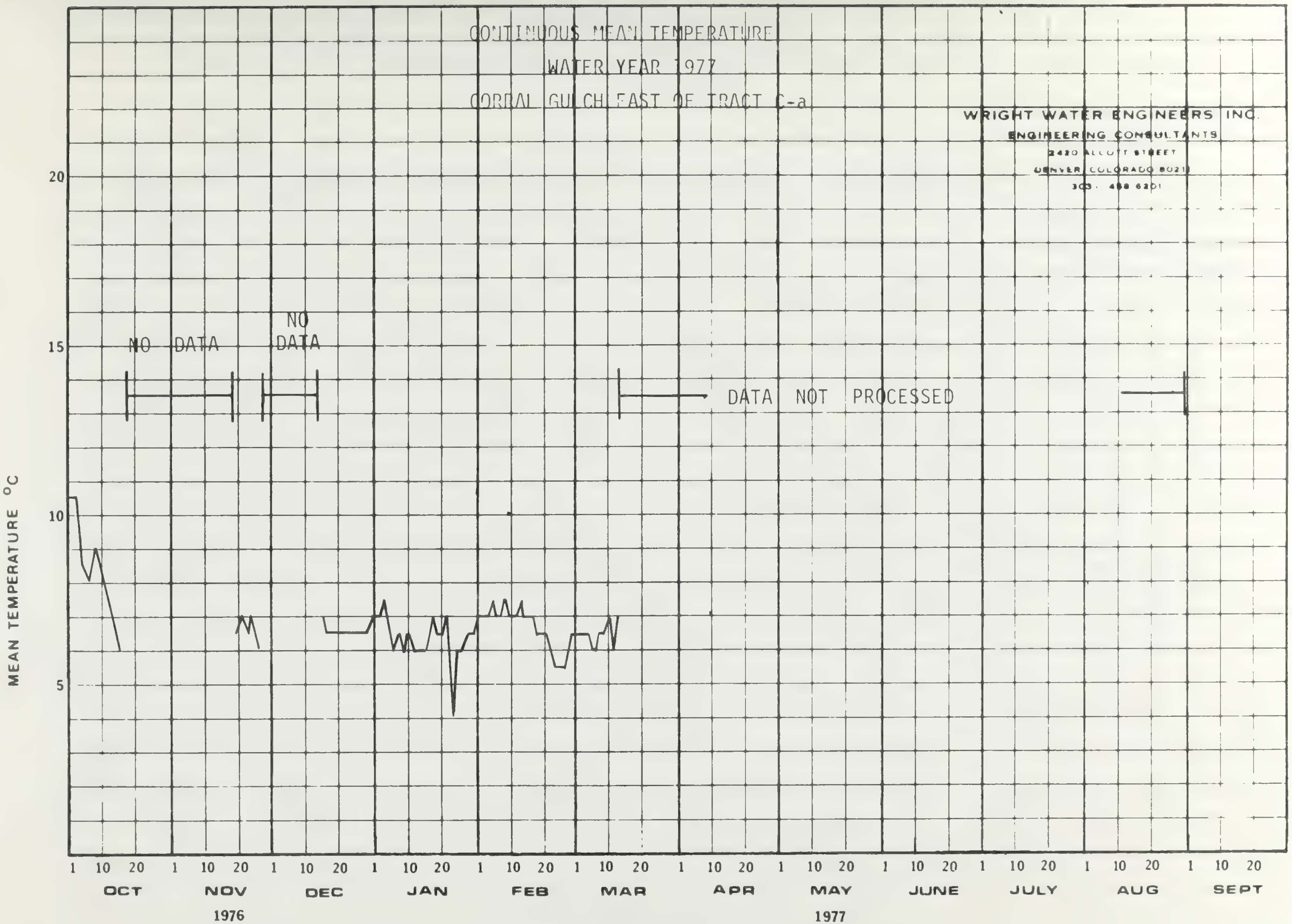



FIGURE 30

CONTINUOUS MEAN TEMPERATURE WATER YEAR 1977 CORRAL GULCH EAST OF TRACT C-a

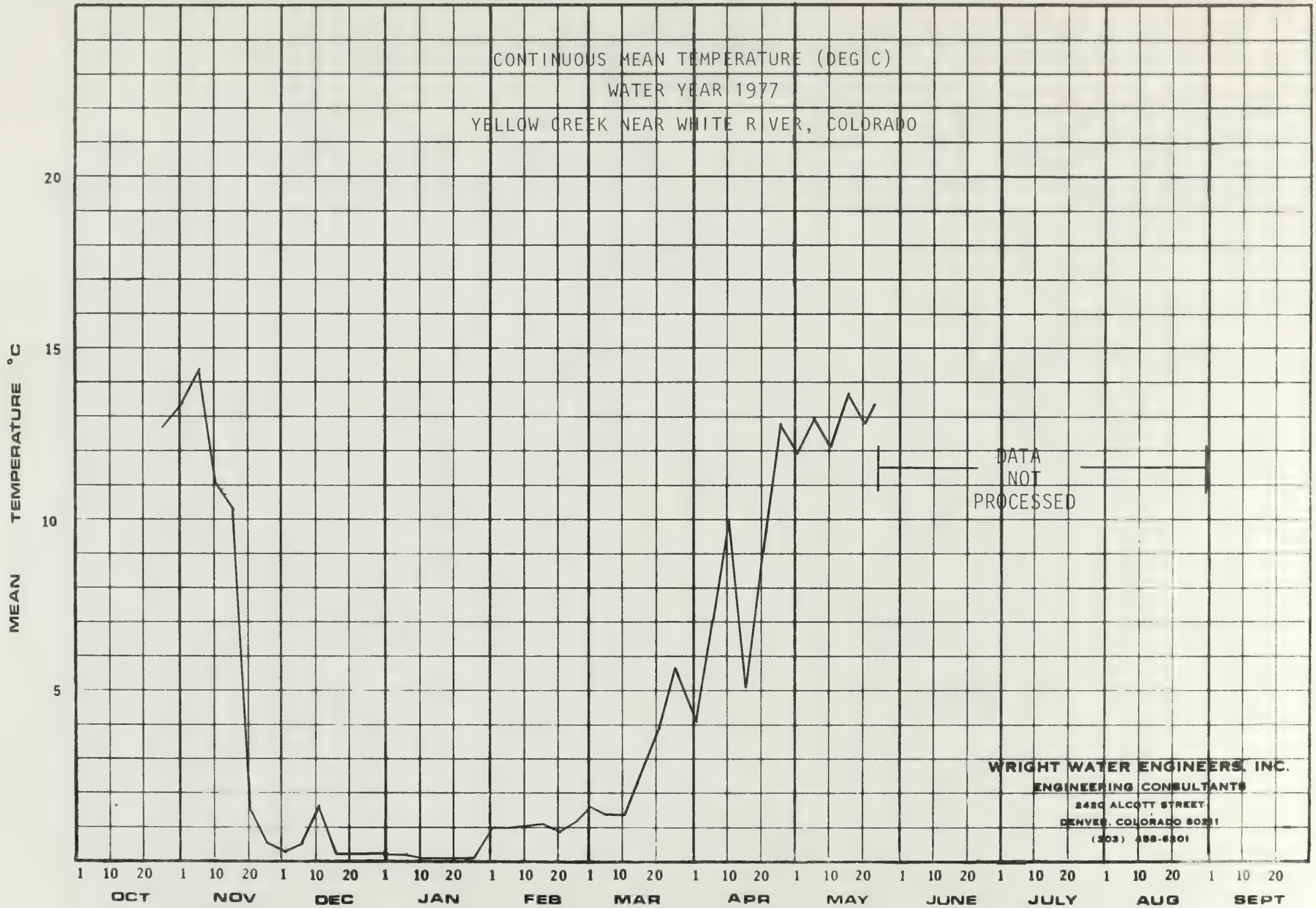



FIGURE 31
CONTINUOUS MEAN TEMPERATURE (DEG C) WATER YEAR 1977 YELLOW CREEK NEAR WHITE RIVER, COLORADO

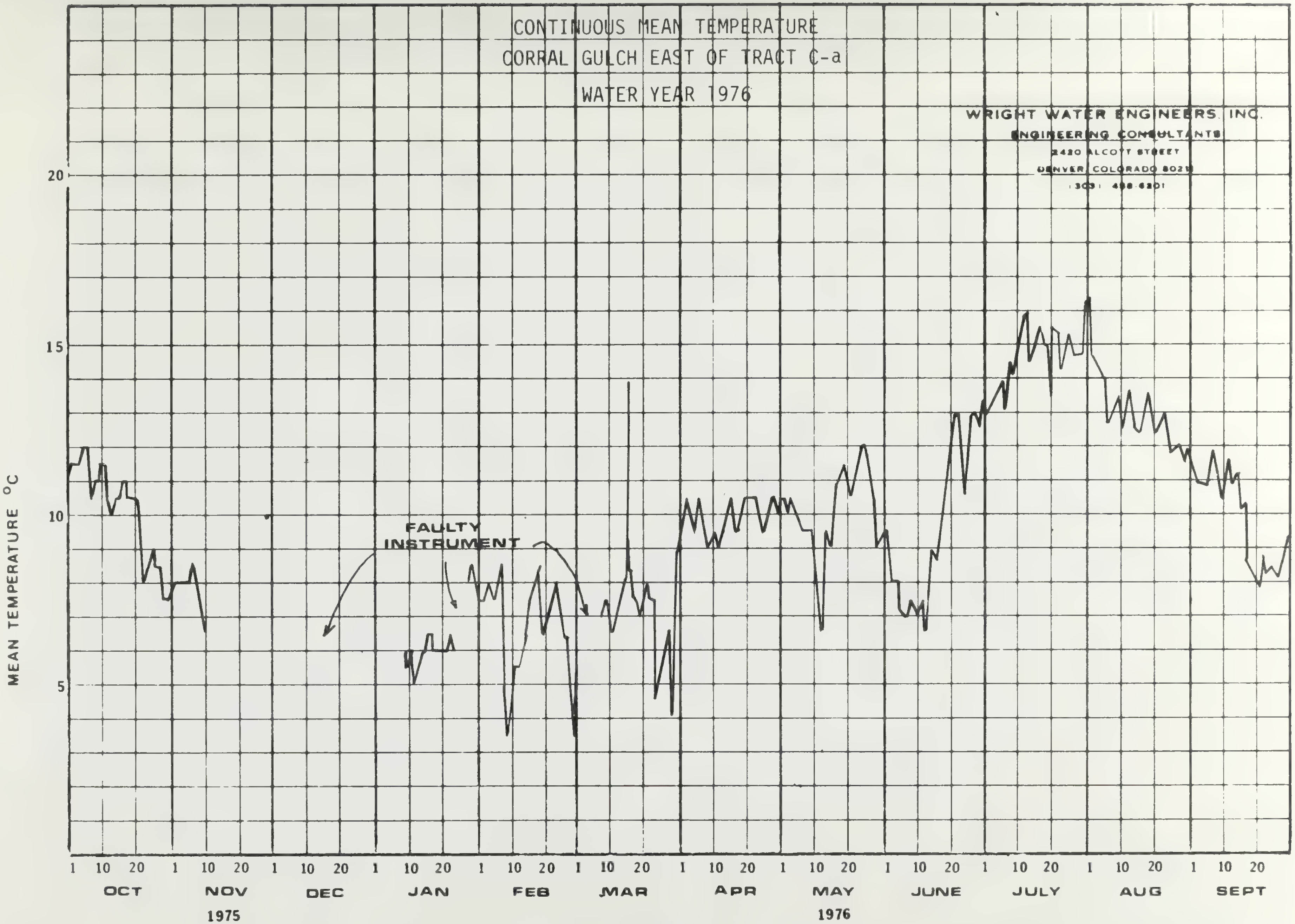



FIGURE 32

CONTINUOUS MEAN TEMPERATURE CORRAL GULCH EAST OF TRACT C-a, WATER YEAR 1976

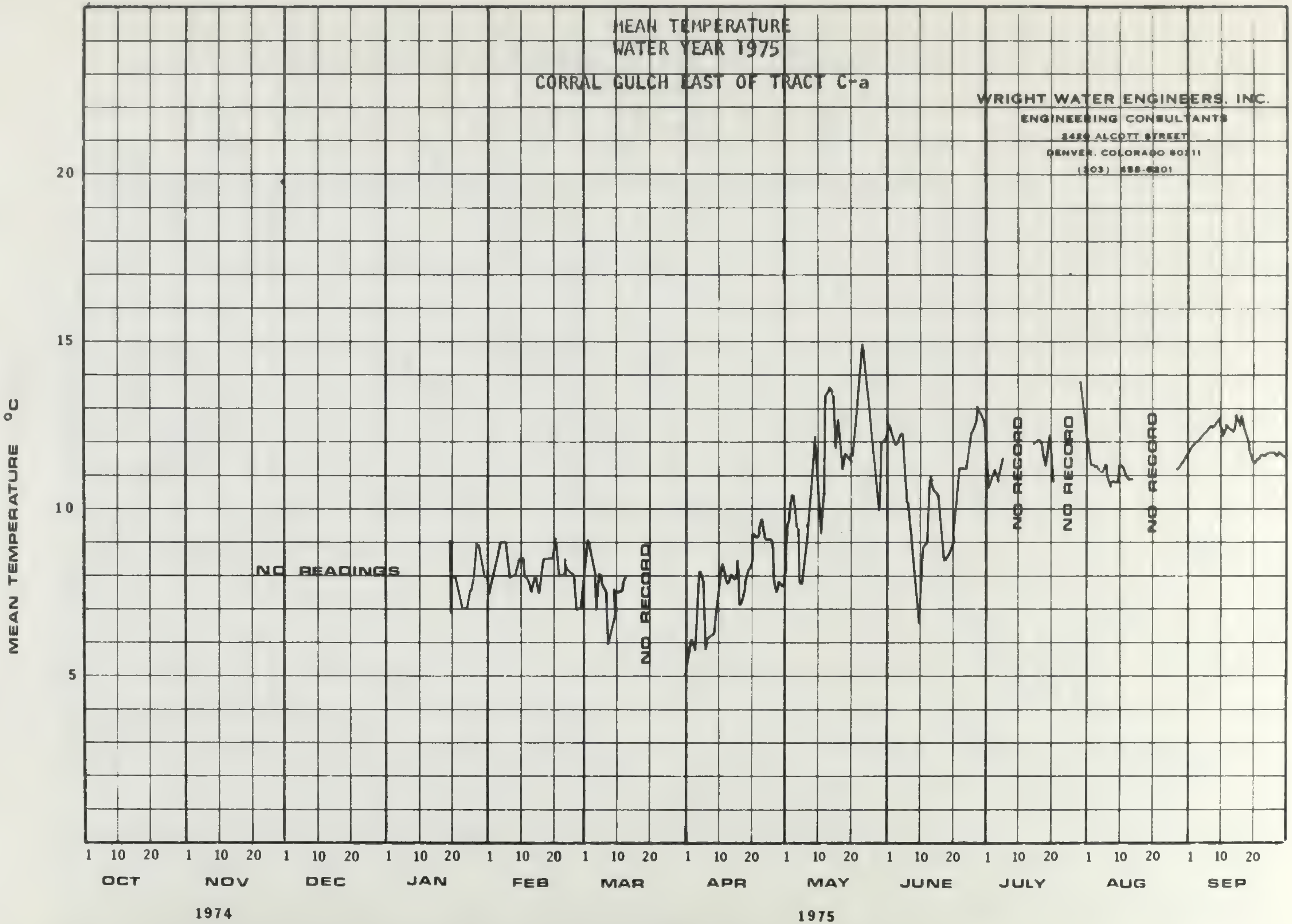



FIGURE 33

CONTINUOUS MEAN TEMPERATURE WATER YEAR 1975 CORRAL GULCH EAST OF TRACT C-a

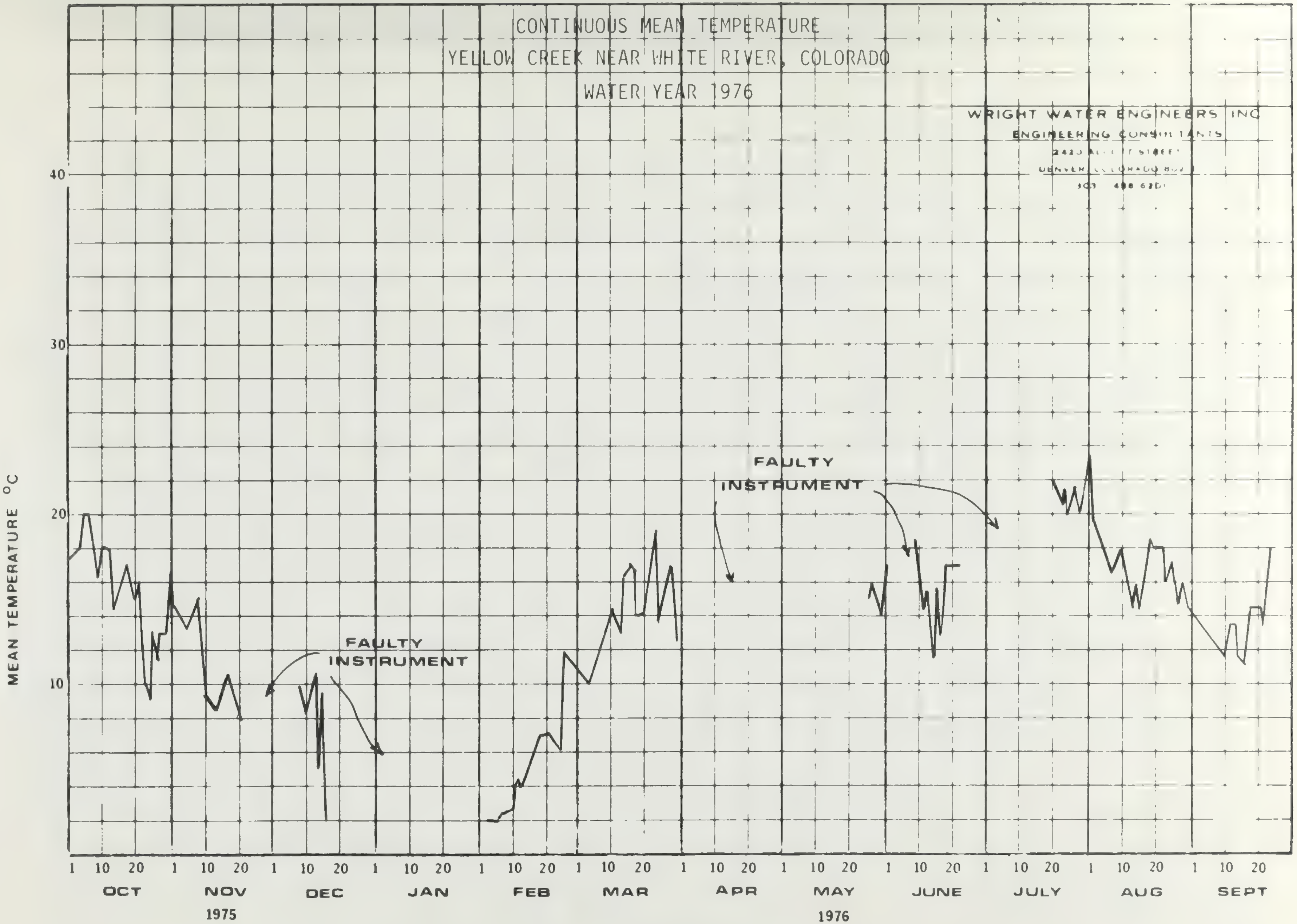



FIGURE 34

CONTINUOUS MEAN TEMPERATURE YELLOW CREEK NEAR WHITE RIVER, COLORADO, WATER YEAR 1976

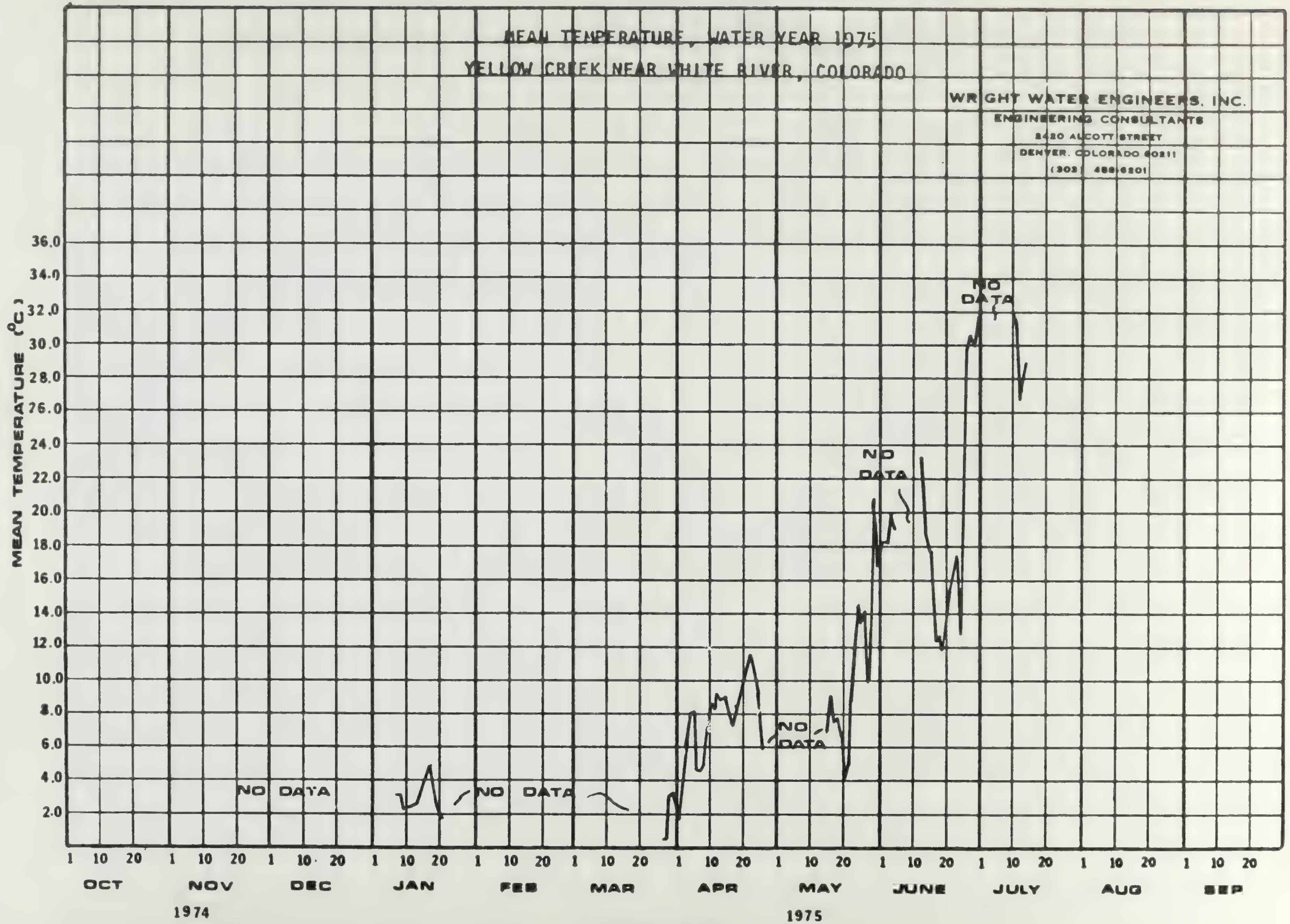



FIGURE 35

CONTINUOUS MEAN TEMPERATURE, WATER YEAR 1975 YELLOW CREEK NEAR WHITE RIVER, COLORADO

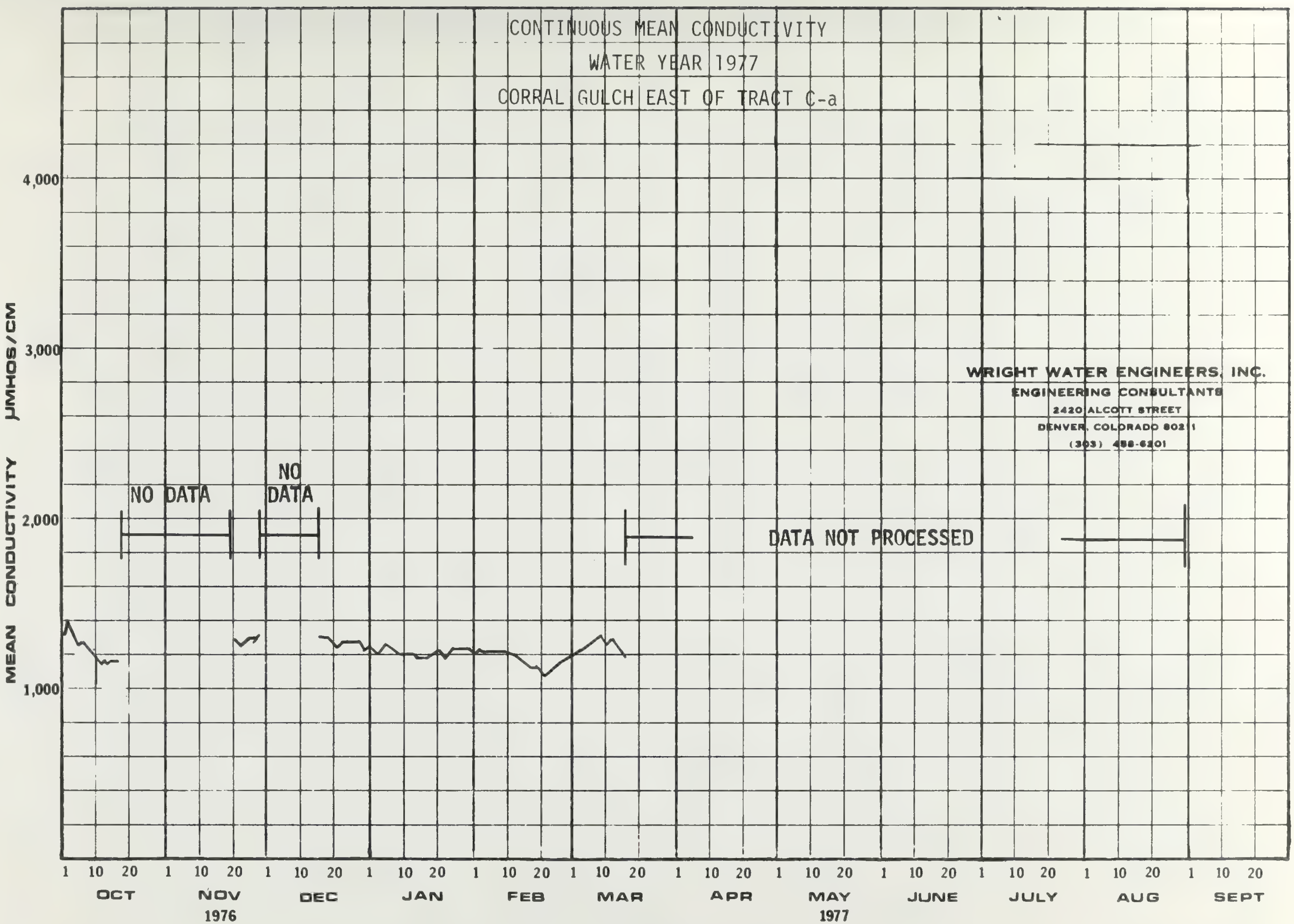



FIGURE 36

CONTINUOUS MEAN CONDUCTIVITY WATER YEAR 1977 CORRAL GULCH EAST OF TRACT C-a

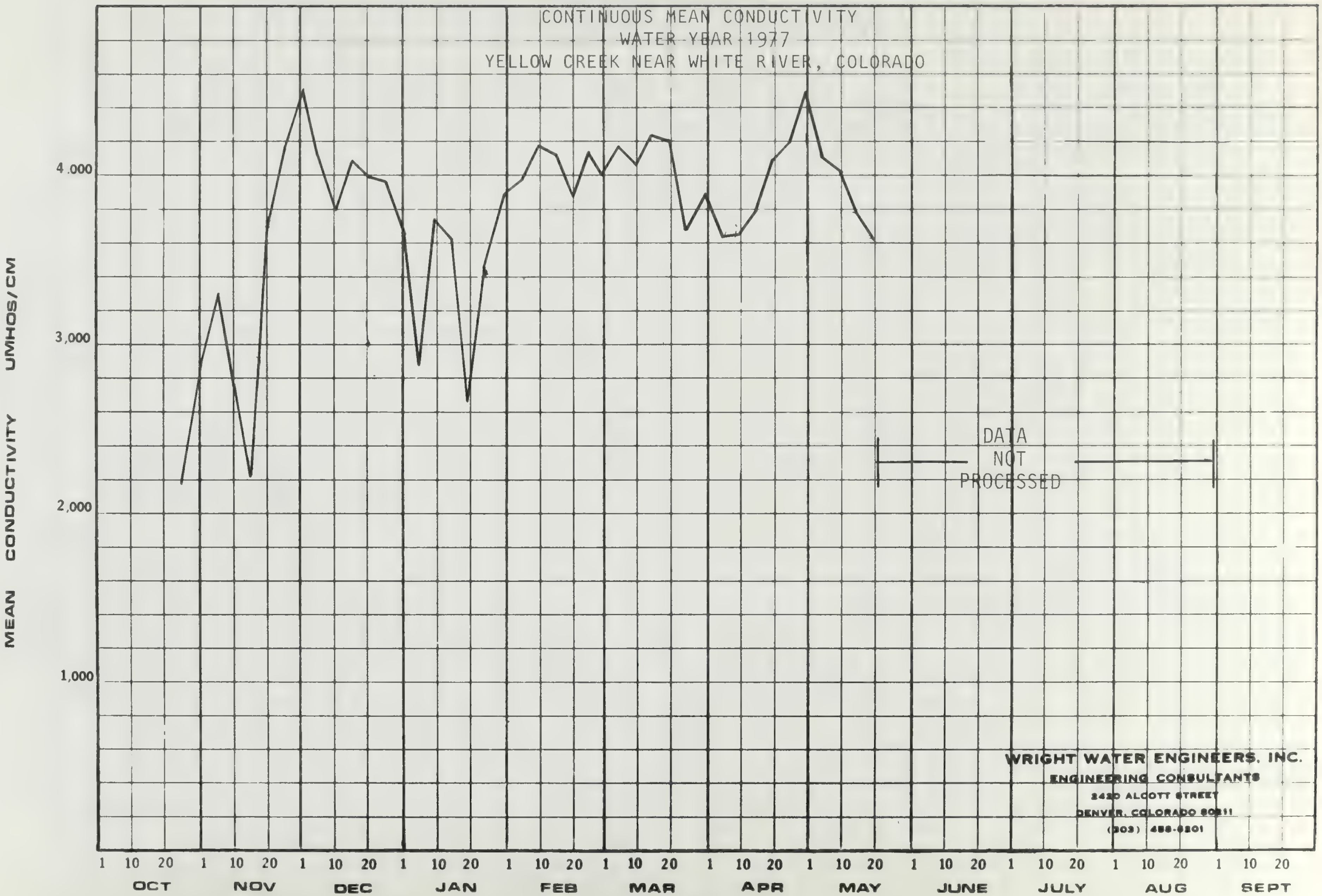



FIGURE 37

CONTINUOUS MEAN CONDUCTIVITY WATER YEAR 1977 YELLOW CREEK NEAR WHITE RIVER, COLORADO

recorded for the two previous years of data collection, as shown on Figures 38 through 41. This lack of variation in the conductivity data is due, in our opinion, to the absence of snowmelt runoff, which in the past two years, has diluted the base flow conductivity measurements, resulting in some values which were much lower than those reported in the interim period.

At the time of this report, the results of the mean conductivity and temperature data collection program by the USGS have not been reported for the following gaging stations: Dry Fork, Corral Gulch near the Western Tract Boundary, Box Elder Gulch, Rinky Dink Gulch, and Stake Springs Draw. In addition, sediment data have not been received for any of these surface water gaging stations for the period starting September 1, 1976 through August 30, 1977. These data will be submitted at a later date.

# CHAPTER 2 - ALLUVIAL GROUNDWATER AQUIFERS

## 2.1 OBJECTIVES

The objectives of these studies were to monitor static water levels and limited physical parameters of the alluvial groundwater and to compare these data with baseline data.

## 2.2 METHODS

Temperature, specific conductance and static water level of all eight water-bearing alluvial monitoring holes were monitored on a semi-annual basis during the interim monitoring program. Techniques used to monitor these parameters were identical to those utilized during the baseline monitoring program. In addition, water level was continuously recorded at the G-S S-11 hole.

Conductivity, temperature and static water level at the alluvial aquifers were monitored twice during the year, concurrently with the surface water sampling.

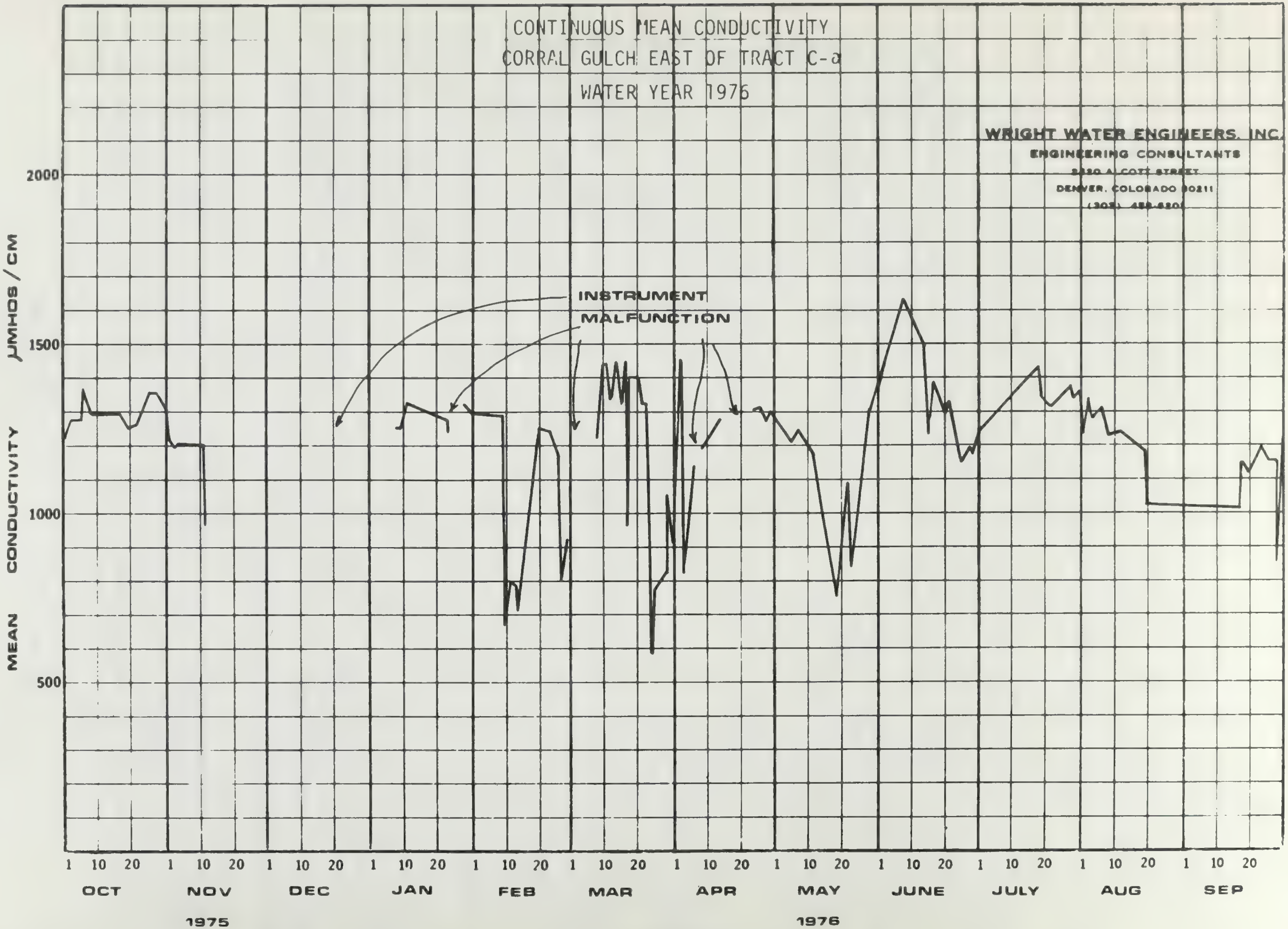



FIGURE 38

CONTINUOUS MEAN CONDUCTIVITY CORRAL GULCH EAST OF TRACT C-a, WATER YEAR 1976

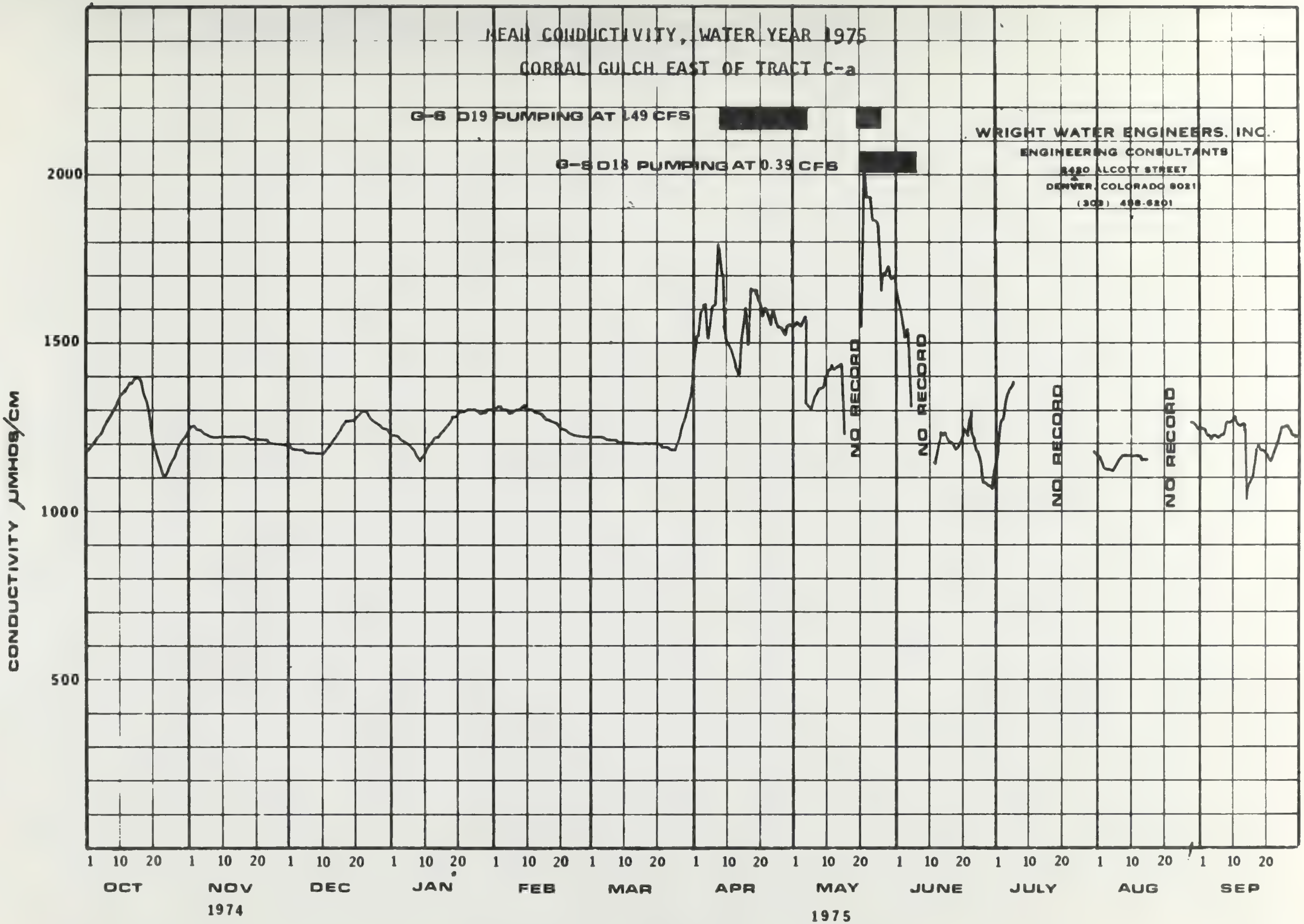



FIGURE 39

CONTINUOUS MEAN CONDUCTIVITY, WATER YEAR 1975, CORRAL GULCH EAST OF TRACT C-a

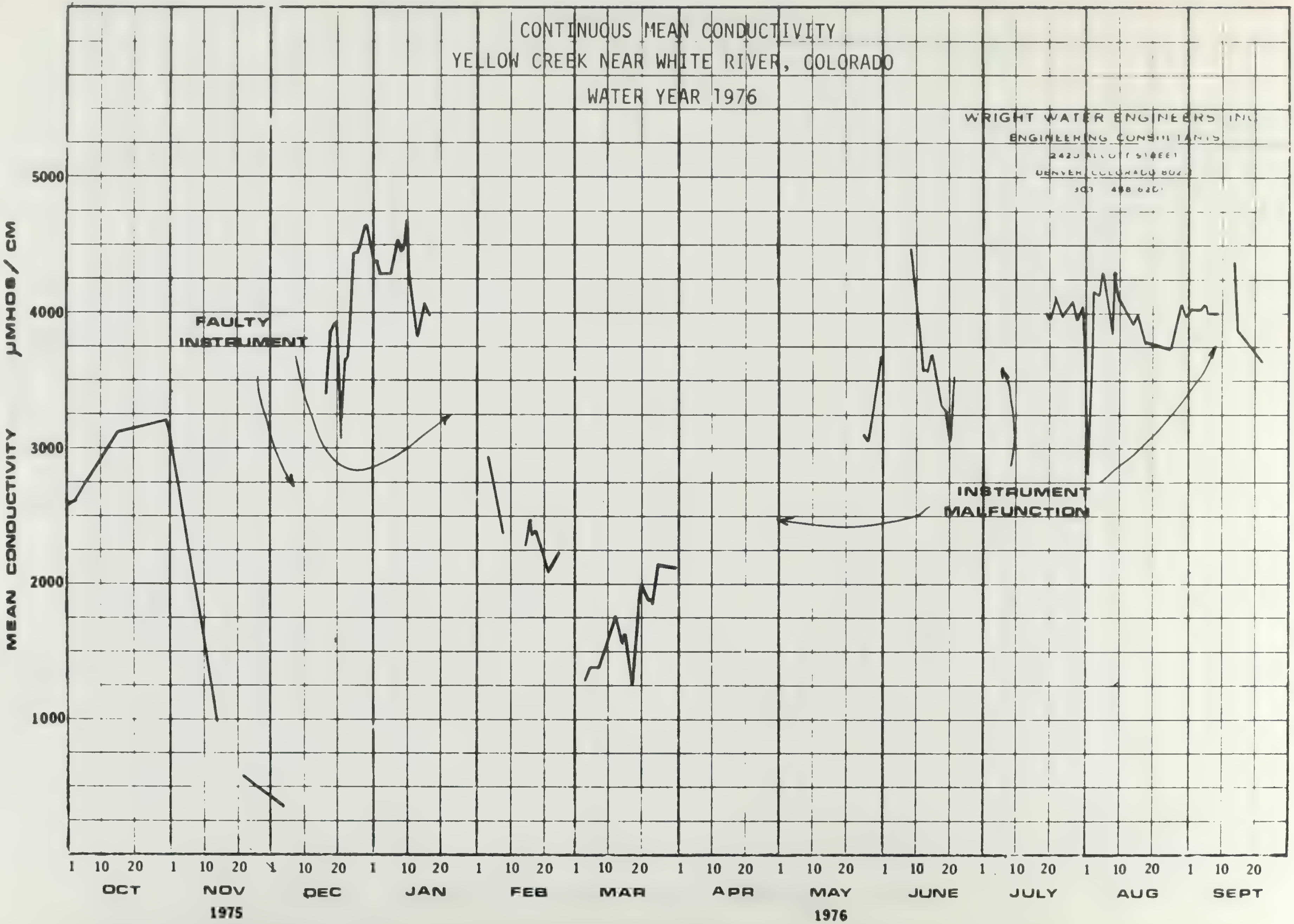



FIGURE 40

CONTINUOUS MEAN CONDUCTIVITY, YELLOW CREEK NEAR WHITE RIVER, COLORADO, WATER YEAR 1976

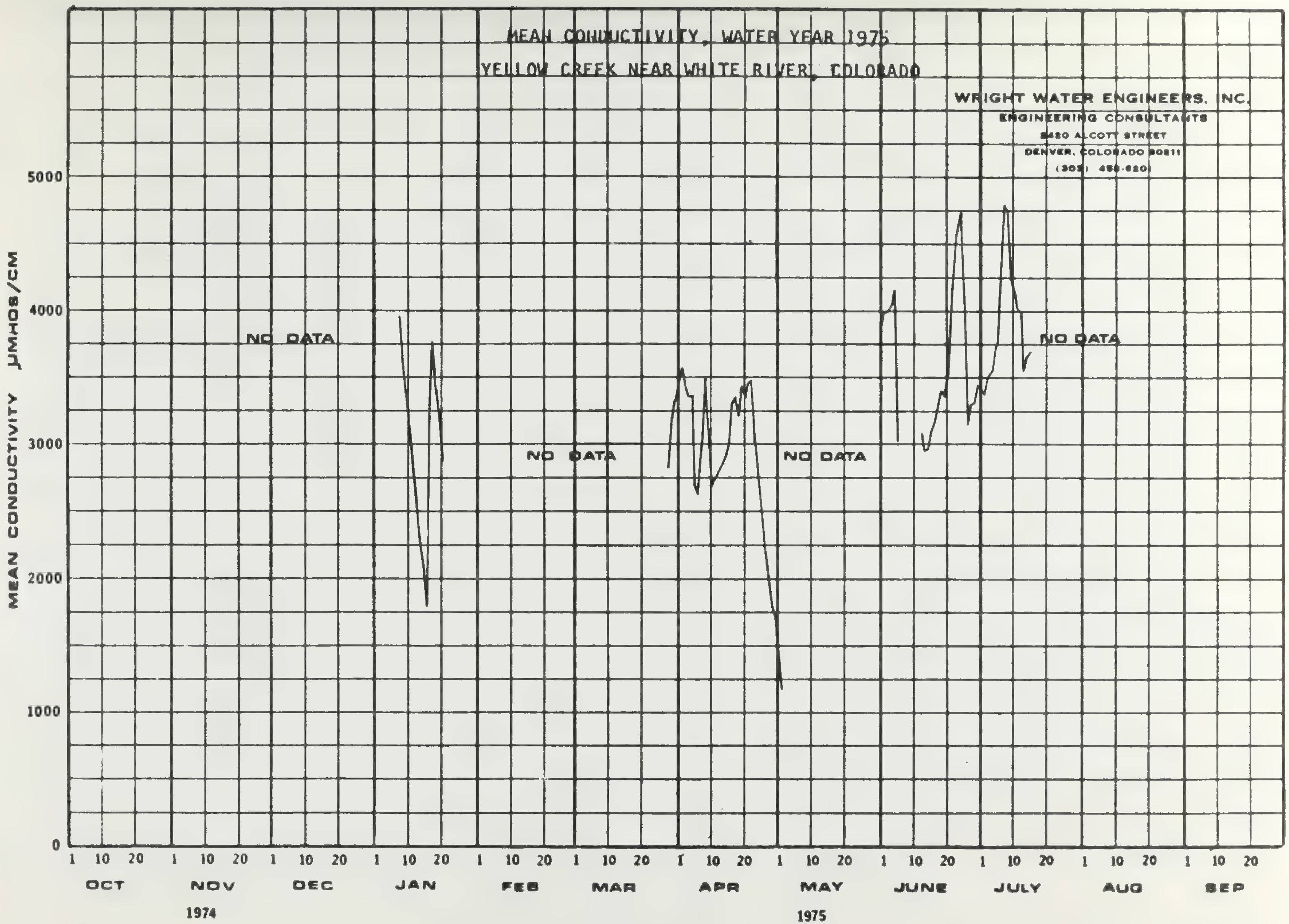



FIGURE 41

CONTINUOUS MEAN CONDUCTIVITY, WATER YEAR 1975, YELLOW CREEK NEAR WHITE RIVER, COLORADO

## 2.3 DISCUSSION AND RESULTS

The results of the alluvial water level monitoring during the interim period are shown on Figures 42 through 45 . The only holes which had water in them during the baseline and during the interim periods were G-S S-7, G-S S-8, G-S S-11, and G-S S-12. As can be seen on the following figures, the water level trends indicated by the monitoring of the alluvial holes during the interim period were similar to those which occurred during the previous years.

There is one anomaly in the data, and that is that the snowmelt runoff did not appear to create the normal high alluvial water levels in the early summer (see Figure 44 ), for G-S S-11. This apparent anomaly is likely a result of the very low snowpack received during the winter of 1976 - 1977. The surface water gaging station did not indicate normal snowmelt runoff. Therefore, less than normal annual snowmelt recharge would be expected.

The semi-annual measurements of conductivity, temperature, and static water levels at the alluvial holes monitored in the vicinity of Tract C-a were made in April 1977. The table below shows the results of these measurements in comparison with the baseline maxima and minima. A quick review of the maxima and minima with the results measured in May 1977 indicates that the interim values were within 80 percent of the minimum value and not greater than the maximum value recorded during the snowmelt season, which includes the months of March, April, May, and June. Therefore, no additional water samples were collected during the interim monitoring period.

SEMI-ANNUAL TEMPERATURE AND CONDUCTIVITY MONITORING
OF ALLUVIAL TEST HOLES FROM APRIL 1977

| | Temperature C | | | Conductivity µmho/cm | | |
|---|---|---|---|---|---|---|
| Test Hole | Baseline Maximum | Baseline Minimum | 5/19/1977 | Baseline Maximum | Baseline Minimum | 5/19/1977 |
| G-S S-7 | 11.28 | 6.11 | 6.0 | 1440 | 990 | 1142 |
| G-S S-8 | 14.00 | 7.89 | 8.2 | 1150 | 860 | 995 |
| G-S S-11 | 13.50 | 8.83 | 7.8 | 2220 | 1560 | 1580 |
| G-S S-12 | 13.22 | 7.50 | 6.3 | 2090 | 1210 | 1545 |

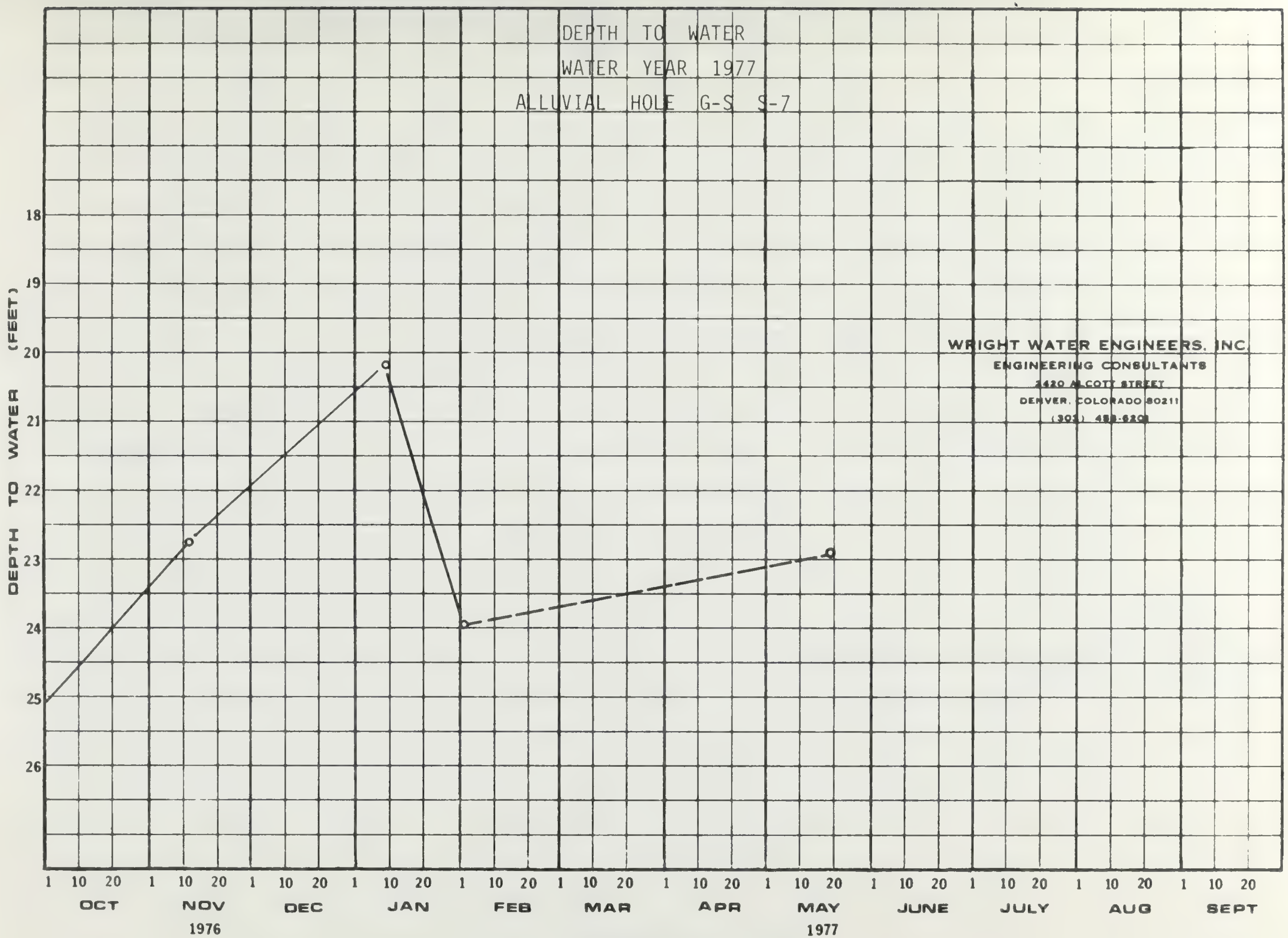



FIGURE 42

DEPTH TO WATER, WATER YEAR 1977, ALLUVIAL HOLE G-S S-7

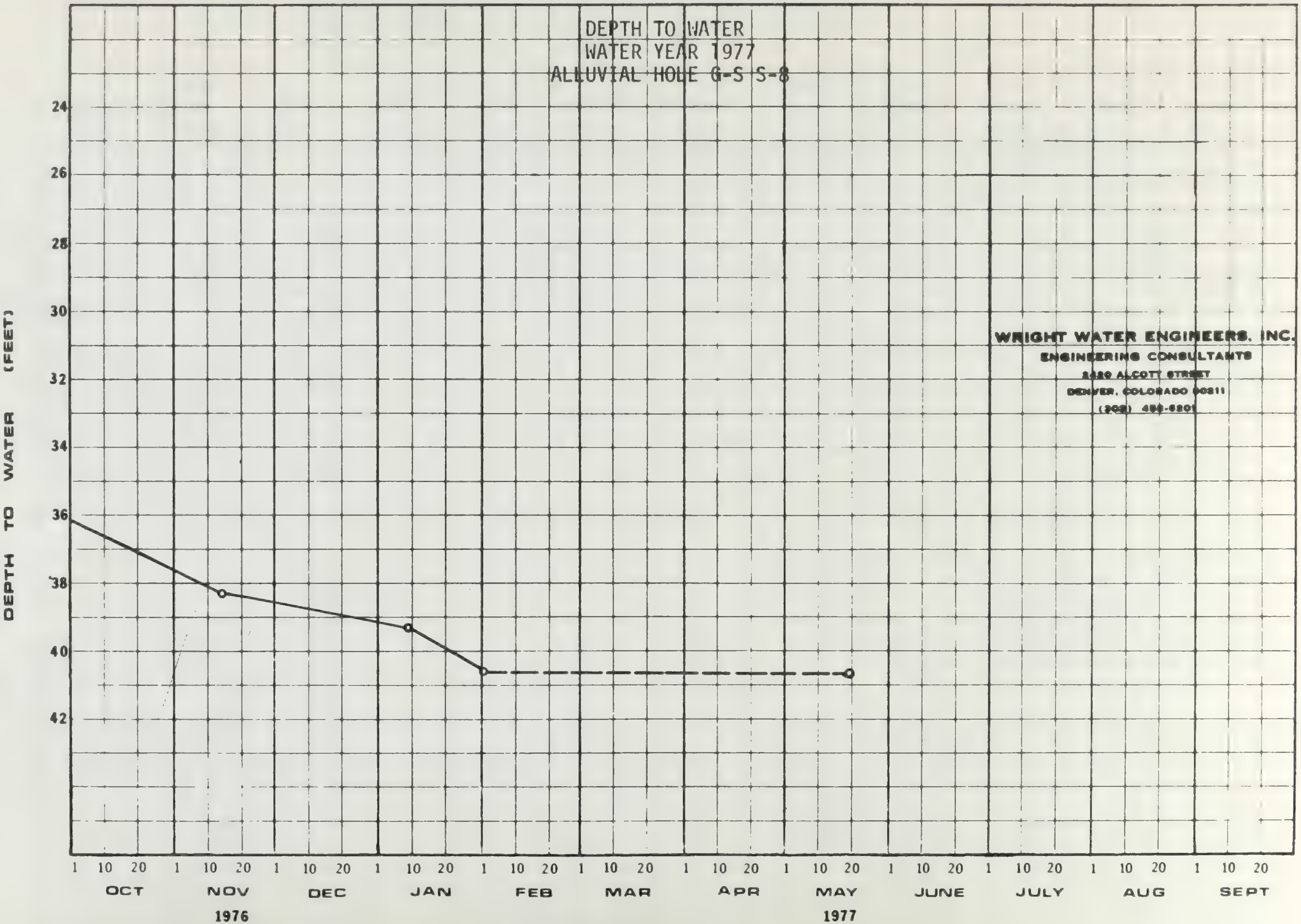



FIGURE 43

DEPTH TO WATER, WATER YEAR 1977 ALLUVIAL HOLE G-S S-8

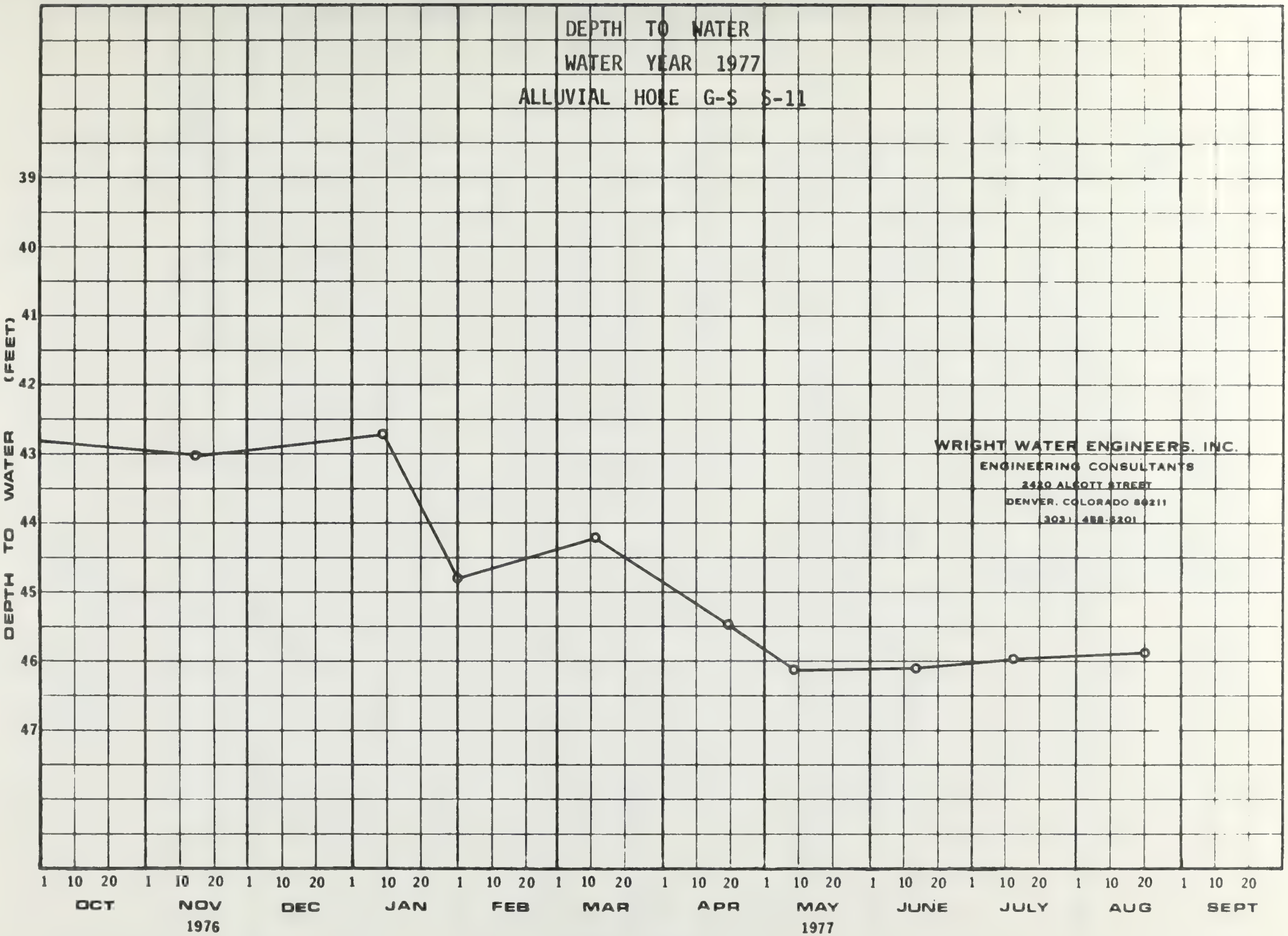



FIGURE 44

DEPTH TO WATER, WATER YEAR 1977, ALLUVIAL HOLE G-S S-11

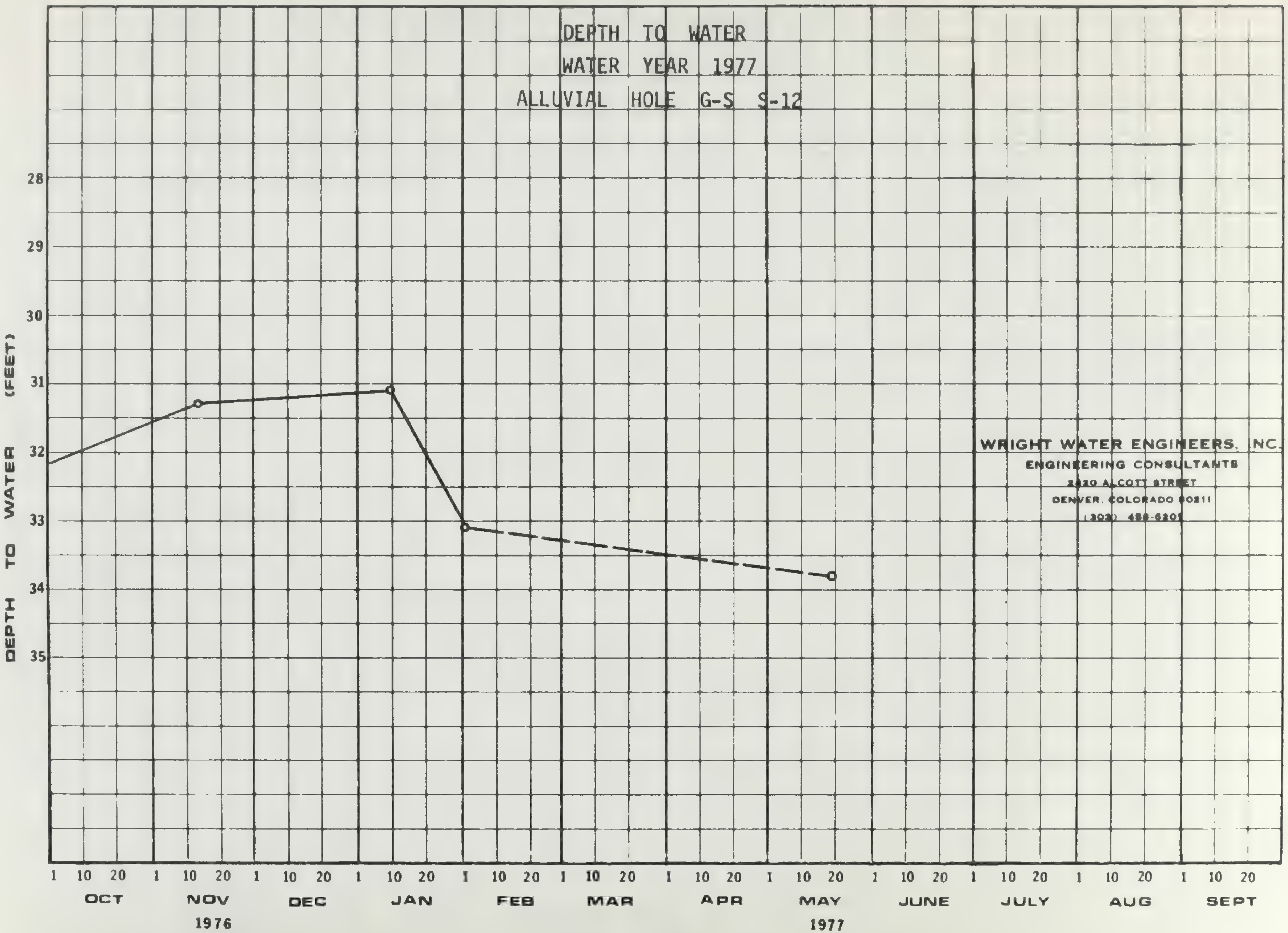



FIGURE 45

DEPTH TO WATER, WATER YEAR 1977, ALLUVIAL HOLE G-S S-12

# CHAPTER 3 - DEEP GROUNDWATER AQUIFERS

## 3.1 OBJECTIVES

The objective of this program was to monitor the static water level in the deep groundwater aquifers in the vicinity of Tract C-a.

## 3.2 METHODS

Static water levels were monitored in all deep aquifer holes on a semi-annual (fall and spring) basis during interim studies. In addition, water levels were continuously recorded in both the lower and upper aquifers at well G-S 4-5 by on site recorders. See the first RBOSP Semi-Annual Report (1977) for additional detail on methods.

## 3.3 DISCUSSION AND RESULTS

The results of the deep groundwater aquifer monitoring are presented on Tables 26 - 29, indicating the water level of each of the holes from October 1975 through the most current reading. Also, the results of the continuous monitoring of G-S 4-5 are shown on Figures 46 and 47 for the upper and lower aquifers, respectively.

A comparison of the measurements taken during the interim period with those measurements taken during the preceding year indicates that the interim measurements are within the expected range based upon the second year of baseline measurements. There are, however, some values for the upper aquifer that appear to be slightly lower than might normally be expected. These are for holes which lie north of the Salt Creek Anticline which runs diagonally from the northwest to the southeast through the tract. One possible reason for this decline in water level may be the lack of recharge which normally comes from the northwest and

TABLE 26

UPPER AQUIFER WATER LEVEL. OCTOBER 1975 - AUGUST 1976. (Below Ground Surface (ft))

| | 9 Oct. | 20 Nov. | 12 Dec. | 28 Jan. | 17 Feb. | 29 Mar. | 14 April | 21 May | 23 June | 30 July | 28 Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AM 2A | 389.45 | 387.63 | 386.41 | 385.17 | 384.34 | 383.19 | 382.50 | 381.85 | -- | 379.40 | 379.09 |
| AM 3 | 33.57 | 33.45 | 33.11 | 33.23 | 33.04 | 32.79 | 31.60 | 30.04 | 28.72 | 29.17 | 30.06 |
| CE 702 | 52.40 | 52.30 | 52.39 | 52.64 | 52.65 | 52.80 | 52.66 | 53.02 | 54.50 | 53.38 | 53.70 |
| CE 707 | 259.79 | 258.76 | 258.11 | 257.25 | 256.64 | 242.22 | 250.32 | 250.60 | 250.97 | 252.03 | 252.00 |
| CE 708 | 48.87 | 50.60 | 49.86 | 51.78 | 51.80 | 51.30 | 47.72 | 44.81 | 46.43 | 44.30 | 46.91 |
| CE 709 | 39.84 | 37.02 | 36.14 | 35.90 | 35.69 | 35.50 | 34.88 | 35.00 | 34.48 | 33.90 | 38.84 |
| G-S 1 | 244.68 | 245.27 | 245.59 | 246.19 | 246.53 | 246.28 | 244.53 | 243.26 | 242.57 | 241.92 | 242.10 |
| G-S 2-3 | 103.49 | 102.75 | 102.35 | 102.25 | 101.97 | 100.87 | 100.28 | 99.86 | 99.26 | 99.06 | 99.26 |
| G-S 4-5 | 75.05 | 74.77 | 74.29 | 74.36 | 74.01 | 73.48 | 72.98 | 72.86 | 73.33 | 72.42 | 72.47 |
| G-S 6 | 55.62 | 55.54 | 55.42 | 55.50 | 55.45 | 55.27 | 54.95 | 55.22 | 55.10 | 55.20 | 55.61 |
| G-S 9 | 311.43 | 312.69 | 316.33 | 319.29 | 319.95 | 321.42 | 320.94 | 317.03 | 316.45 | 317.23 | 319.63 |
| G-S 10 | 340.35 | 340.11 | -- | 339.75 | 339.60 | 339.36 | 339.14 | 339.48 | 339.50 | 339.37 | 339.62 |
| G-S 11 | 460.35 | 459.67 | 459.00 | 458.76 | 458.40 | 457.72 | 456.95 | 456.42 | 455.46 | 454.99 | 455.35 |
| G-S 12 | 388.30 | 387.60 | 386.97 | 386.55 | 386.24 | 385.41 | 384.67 | 382.79 | 382.83 | 381.86 | 382.91 |
| G-S 13 | 382.62 | 382.19 | 381.68 | 381.72 | 381.45 | 381.04 | 380.97 | 380.41 | 380.11 | 380.12 | 378.47 |
| G-S 15 | 274.73 | | | 273.56 | 273.41 | 272.99 | 272.83 | 272.69 | 274.76 | 272.58 | 272.49 |
| G-S M-1 | 620.64 | 621.13 | -- | 619.10 | 618.77 | 618.71 | 625.57 | 619.31 | 619.40 | 619.95 | 620.26 |
| G-S M-2 | 231.22 | 230.68 | 229.75 | 228.94 | 228.23 | 225.76 | 225.39 | 225.36 | 224.01 | 221.28 | 223.13 |
| G-S M-3 | 21.59 | 21.96 | 20.32 | 19.16 | 19.21 | 18.57 | 17.50 | 17.72 | 18.75 | 18.58 | 18.46 |
| G-S M-4 | 491.80 | 491.95 | 491.56 | 492.04 | 492.08 | 492.25 | -- | 492.77 | 492.94 | 493.26 | 491.60 |
| G-S M-5 | 235.73 | 235.81 | 235.24 | 235.70 | 235.64 | 235.51 | 235.38 | 235.75 | 235.80 | 235.94 | 235.90 |
| TO-1 | 21.80 | 20.65 | 20.41 | 20.95 | 20.83 | 20.53 | 20.13 | 22.35 | 22.46 | 22.30 | 22.73 |
| TO-2 | 113.36 | 113.36 | 112.96 | 112.93 | 112.73 | 112.57 | 112.18 | 113.81 | 113.70 | 111.32 | 111.44 |

-- Water levels not collected due to poor weather conditions making access to hole difficult or because problems with monitoring hole and equipment.

TABLE 27

UPPER AQUIFER WATER LEVEL. OCTOBER 1976 - SEPTEMBER 1977. (Below Ground Surface (ft))

| | 21 Oct. | 14 Nov. | Dec. | Jan. | Feb. | Mar. | 19 April | 9 May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM 2A | 378.27 | 378.20 | | | | | 376.91 | | | | | |
| AM 3 | 33.15 | 34.81 | | | | | 35.10 | | | | | |
| CE 702 | 54.19 | 54.34 | | | | | | 56.68 | | | | |
| CE 707 | 251.90 | 251.68 | | | | | 253.56 | | | | | |
| CE 708 | 48.59 | 49.39 | | | | | 52.38 | | | | | |
| CE 709 | 33.88 | 33.71 | | | | | 35.35 | | | | | |
| G-S 1 | 243.26 | 243.92 | | | | | 247.17 | | | | | |
| G-S 2-3 | 98.23 | 98.06 | | | | | 96.66 | | | | | |
| G-S 4-5 | 72.39 | 73.59 | | | | | 72.10 | 74.59 | | | | |
| G-S 6 | 56.02 | 54.14 | | | | | 57.12 | | | | | |
| G-S 9 | 318.49 | 319.64 | | | | | 325.11 | | | | | |
| G-S 10 | 339.53 | 339.40 | | | | | 339.87 | | | | | |
| G-S 11 | 455.91 | 457.02 | | | | | 456.68 | | | | | |
| G-S 12 | 383.58 | 384.79 | | | | | 384.29 | | | | | |
| G-S 13 | 386.06 | 384.15 | | | | | 383.35 | | | | | |
| G-S 15 | 272.26 | 272.20 | | | | | 272.40 | | | | | |
| G-S M-1 | 620.96 | 622.15 | | | | | 623.99 | | | | | |
| G-S M-2 | 222.65 | 221.98 | | | | | 220.74 | | | | | |
| G-S M-3 | 17.96 | 17.85 | | | | | 16.45 | | | | | |
| G-S M-4 | 493.62 | 493.84 | | | | | 495.11 | | | | | |
| TO-1 | 23.54 | 23.64 | | | | | 23.96 | | | | | |
| TO-2 | 110.85 | 111.42 | | | | | 110.93 | | | | | |

TABLE 28

LOWER AQUIFER WATER LEVEL. OCTOBER 1975 - AUGUST 1976. (Below Ground Surface (ft))

| | 9 Oct. | 20 Nov. | 12 Dec. | 28 Jan. | 17 Feb. | 29 Mar. | 14 April | 21 May | 23 June | 30 July | 28 Aug. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AM 2A | 636.67 | 637.70 | 638.02 | 639.71 | 640.11 | 641.15 | 641.63 | 643.56 | -- | 645.47 | 645.51 |
| AM 3 | 310.40 | 311.27 | 311.56 | 313.34 | 313.73 | 314.65 | 315.31 | 316.90 | 317.67 | 318.80 | 319.50 |
| CE 702 | 40.48 | 41.21 | 41.25 | 43.00 | 43.41 | 44.21 | 44.64 | 45.81 | 48.50 | 47.30 | 47.97 |
| CE 707 | 567.51 | 568.70 | 569.21 | 570.67 | 571.04 | 572.19 | 572.53 | -- | 573.00 | 573.81 | 574.78 |
| CE 708 | 297.88 | 298.97 | 299.27 | 300.84 | 301.22 | 302.97 | 303.06 | 303.83 | 304.59 | 306.74 | 307.52 |
| CE 709 | 154.31 | 155.55 | 154.92 | 157.62 | 158.63 | 158.87 | 159.60 | 160.82 | 160.61 | 162.63 | 163.23 |
| G-S 1 | 602.65 | 602.43 | 602.13 | 602.13 | 601.70 | 601.64 | 601.58 | 601.91 | 601.76 | 601.67 | 602.36 |
| G-S 2-3 | 254.92 | 255.98 | 256.61 | 258.03 | 258.32 | 259.43 | 259.81 | 261.05 | 261.79 | 262.79 | 263.66 |
| G-S 4-5 | 98.31 | 99.55 | 100.09 | 100.57 | 101.95 | 102.89 | 103.40 | 104.46 | 105.12 | -- | 105.74 |
| G-S 6 | 44.06 | 45.88 | 46.26 | 47.72 | 48.12 | 49.01 | 49.45 | 50.65 | 51.29 | 52.41 | 52.89 |
| G-S 9 | 513.25 | 514.31 | 514.68 | 516.10 | 516.22 | 517.19 | 517.96 | 517.56 | 518.14 | 518.51 | 519.65 |
| G-S 10 | 389.69 | 390.81 | -- | 392.76 | 393.06 | 394.01 | 394.57 | 396.13 | 396.89 | 398.04 | 398.71 |
| G-S 11 | 721.76 | 723.02 | 723.36 | 725.51 | 725.53 | 726.65 | 727.18 | 727.63 | 728.46 | 729.60 | 730.46 |
| G-S 12 | 649.79 | 649.76 | 650.08 | 651.97 | 652.30 | 653.36 | 653.92 | 655.54 | 656.45 | 659.06 | 656.86 |
| G-S 13 | 573.82 | 574.98 | 575.36 | 577.08 | 577.34 | 578.39 | 578.96 | 580.40 | 581.58 | 582.80 | 579.40 |
| G-S 15 | 363.99 | 365.27 | 365.64 | 367.28 | 367.64 | 368.71 | 369.24 | 370.79 | 371.79 | 372.69 | 373.41 |
| G-S M-1 | 822.20 | 824.61 | -- | 824.87 | 825.18 | 825.84 | 826.59 | 829.59 | 830.34 | 831.35 | 831.79 |
| G-S M-2 | 354.96 | 355.03 | 354.44 | 355.14 | 354.69 | 354.60 | 354.73 | 353.64 | 355.46 | 355.31 | 355.76 |
| G-S M-3 | 139.89 | 140.67 | 139.25 | 140.34 | 139.69 | 139.64 | 145.02 | 140.27 | 140.18 | 140.67 | 140.97 |
| G-S M-4 | 562.50 | 563.58 | 563.95 | 565.32 | 565.65 | 566.55 | -- | -- | -- | 571.65 | 568.23 |
| TO-1 | 127.21 | 128.40 | 128.77 | 130.41 | 130.81 | 131.78 | 132.31 | 133.54 | 134.56 | 135.78 | 136.28 |
| TO-2 | 356.68 | 357.83 | 358.31 | 359.62 | 359.95 | 361.01 | 360.93 | 362.93 | 363.57 | 364.64 | 365.30 |

-- water levels not collected due to poor weather conditions making access to hole difficult or because problems with monitoring hole and equipment.

## TABLE 29

LOWER AQUIFER WATER LEVEL. OCTOBER 1976 - SEPTEMBER 1977. (Below Ground Surface (ft))

| | 21 Oct. | 14 Nov. | Dec. | Jan. | Feb. | Mar. | 19 April | 9 May | June | July | Aug. | Sept. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AM 2A | 647.15 | 647.49 | | | | | 650.28 | | | | | |
| AM 3 | 320.55 | 318.82 | | | | | 323.76 | | | | | |
| CE 702 | 48.98 | 49.18 | | | | | | 51.03 | | | | |
| CE 707 | 575.77 | 576.22 | | | | | 578.91 | | | | | |
| CE 708 | 308.55 | 309.09 | | | | | 310.46 | | | | | |
| CE 709 | 164.26 | 164.67 | | | | | 167.45 | | | | | |
| G-S 1 | 601.94 | 602.02 | | | | | 602.94 | | | | | |
| G-S 2-3 | 264.46 | 264.89 | | | | | 267.61 | | | | | |
| G-S 4-5 | 107.84 | 105.19 | | | | | 111.02 | 110.72 | | | | |
| G-S 6 | 53.81 | 56.19 | | | | | 56.76 | | | | | |
| G-S 9 | 520.87 | 521.17 | | | | | 523.75 | | | | | |
| G-S 10 | 399.71 | 396.97 | | | | | 402.02 | | | | | |
| G-S 11 | 731.42 | 731.96 | | | | | 734.71 | | | | | |
| G-S 12 | 659.25 | 659.62 | | | | | 661.10 | | | | | |
| G-S 13 | 584.46 | 584.91 | | | | | 587.62 | | | | | |
| G-S 15 | 374.34 | 374.81 | | | | | 377.48 | | | | | |
| G-S M-1 | 832.65 | 834.60 | | | | | 835.65 | | | | | |
| G-S M-2 | 355.52 | 353.85 | | | | | 355.93 | 358.25 | | | | |
| G-S M-3 | 141.45 | 143.07 | | | | | 145.34 | | | | | |
| G-S M-4 | 568.79 | 569.50 | | | | | 571.81 | | | | | |
| TO-1 | 137.28 | 137.61 | | | | | 142.43 | | | | | |
| TO-2 | 366.39 | 366.86 | | | | | 369.66 | | | | | |

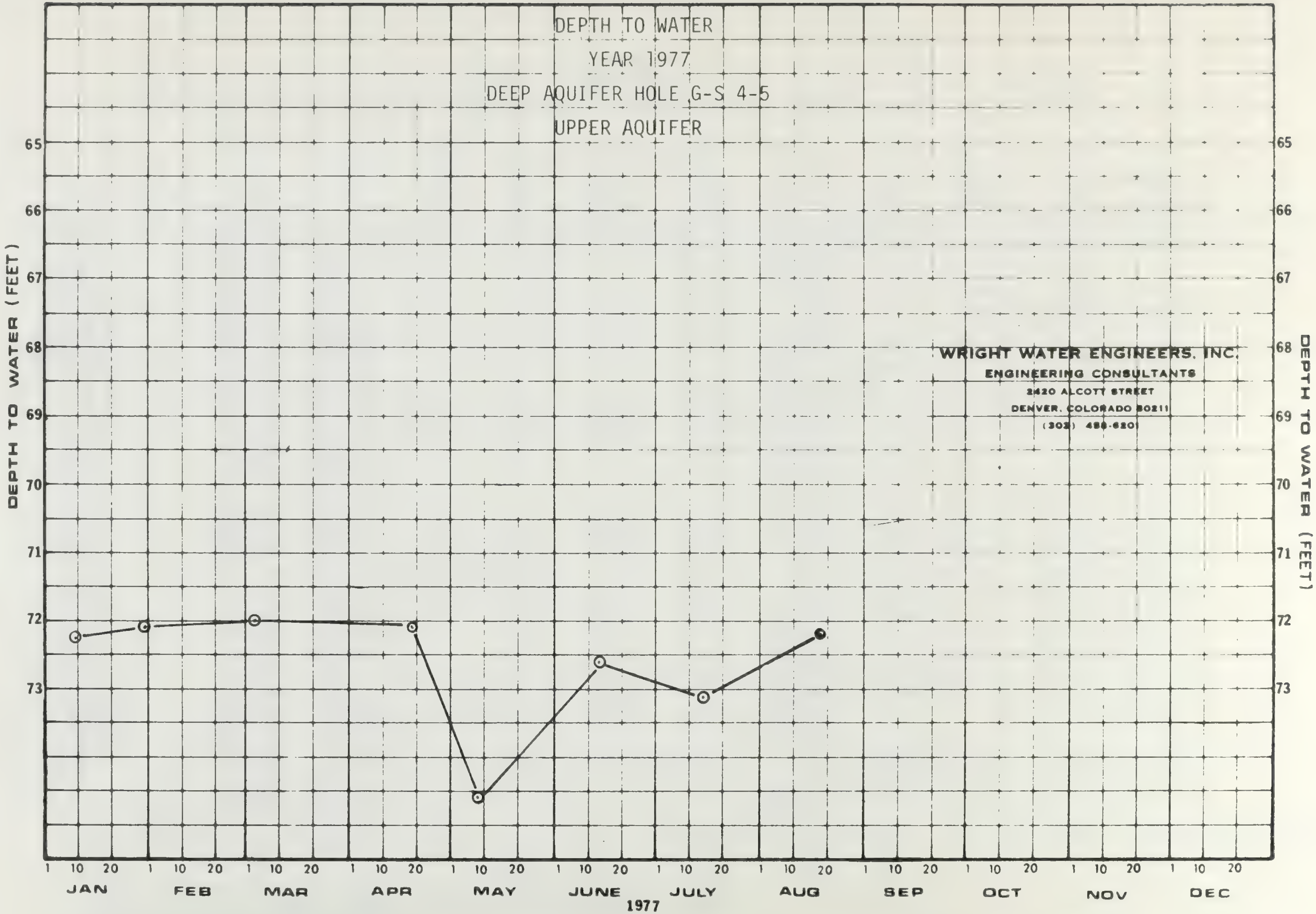



FIGURE 46

DEPTH TO WATER, YEAR 1977, DEEP AQUIFER HOLE G-S 4-5, UPPER AQUIFER

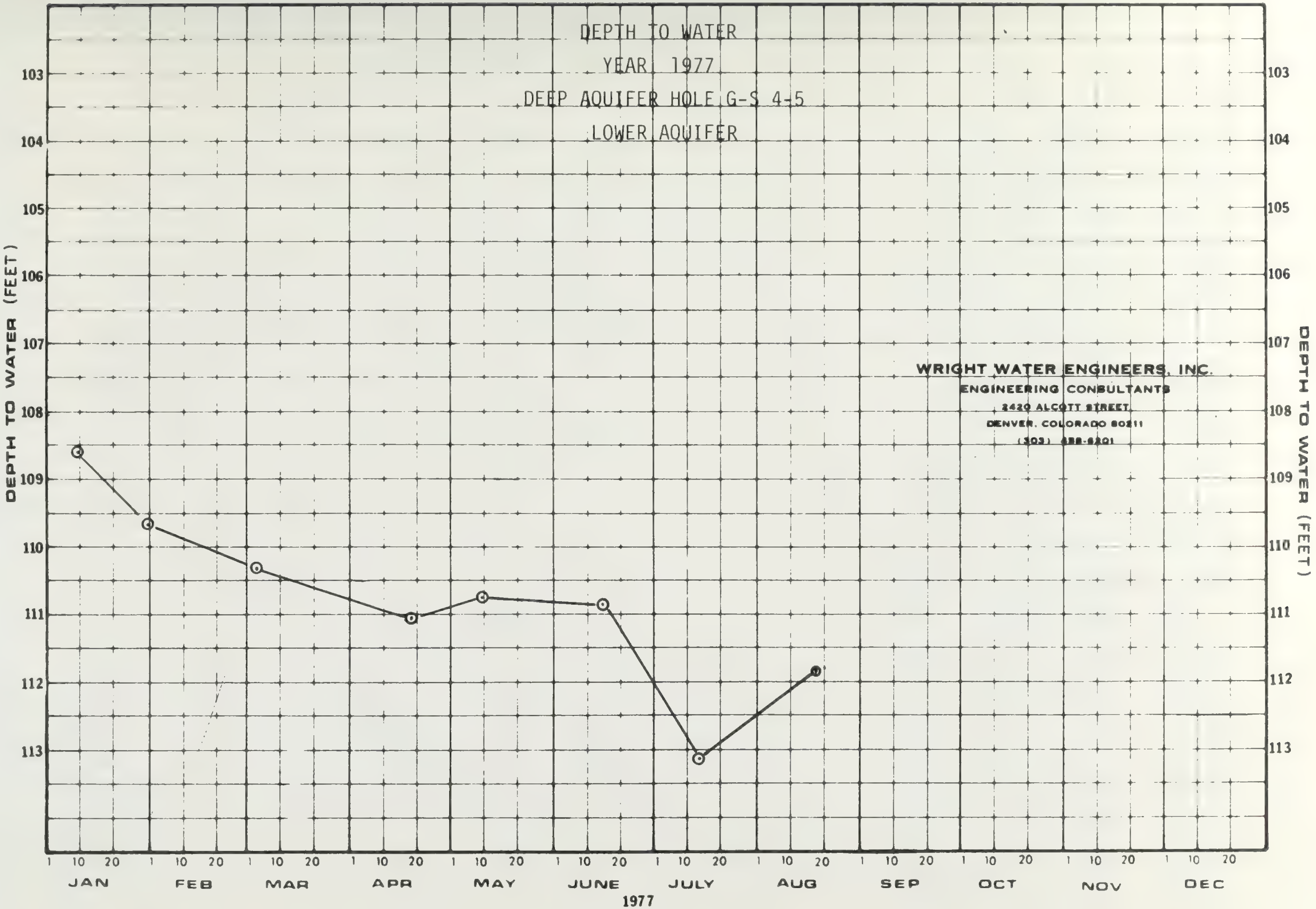



FIGURE 47
DEPTH TO WATER, YEAR 1977, DEEP AQUIFER HOLE G-S 4-5, LOWER AQUIFER

proceeds through the tract. This lack of recharge is probably related to the very minimal snowmelt runoff which occurred during the spring of 1977.

In summary, the results of the water level monitoring of the deep oil shale aquifers indicated that no anomalous readings were collected and that the aquifers responded quite normally when compared with the baseline data. One of the prime purposes for monitoring on a semi-annual basis was to detect any possible failures by the packers separating the two aquifers in the dual aquifer monitor holes. It can be concluded that no such failures were experienced during the study period.

# SECTION IV

# AQUATIC STUDIES

## SECTION IV - AQUATIC STUDIES

A limited variety of aquatic habitats occur on or near Tract C-a. These habitats include small, marshy ponds and small spring brooks. Several miles north of Tract C-a are Yellow Creek, a small perennial stream segment, and the large turbulent White River, the only true river habitat in the Piceance Creek Basin.

Extensive aquatic biological data were collected during the two-year aquatic baseline program for Tract C-a and vicinity. In addition, information was gathered on a number of abiotic components of the aquatic ecosystem, including physical and chemical characteristics of the water, and of the sediments. Extensive investigations of local hydrology have also been conducted. Due to the extensiveness of this baseline information, it was not deemed necessary to collect additional data on all of these components during interim monitoring studies. There was, however, a need to monitor important elements of the aquatic ecosystem during the suspension period to identify and characterize any changes which might occur during this time. This was the primary goal of the interim aquatic biological monitoring program.

During RBOSP aquatic baseline studies, the low abundance and the species composition of phytoplankton, zooplankton, and macrophytes indicated that these groups of organisms were of limited significance in the existing aquatic ecosystems. On the other hand, the periphytic algae and benthic macroinvertebrate communities are important in the aquatic systems on and near Tract C-a, and these communities were included in the interim aquatic monitoring program.

Three representative aquatic sampling stations were selected for this interim aquatic monitoring program (Figure 48). They were:

- Corral Gulch - The sampling station is located at the USGS gaging station on Corral Gulch just as it leaves Tract C-a. This station corresponds to aquatic baseline Station Number 13.

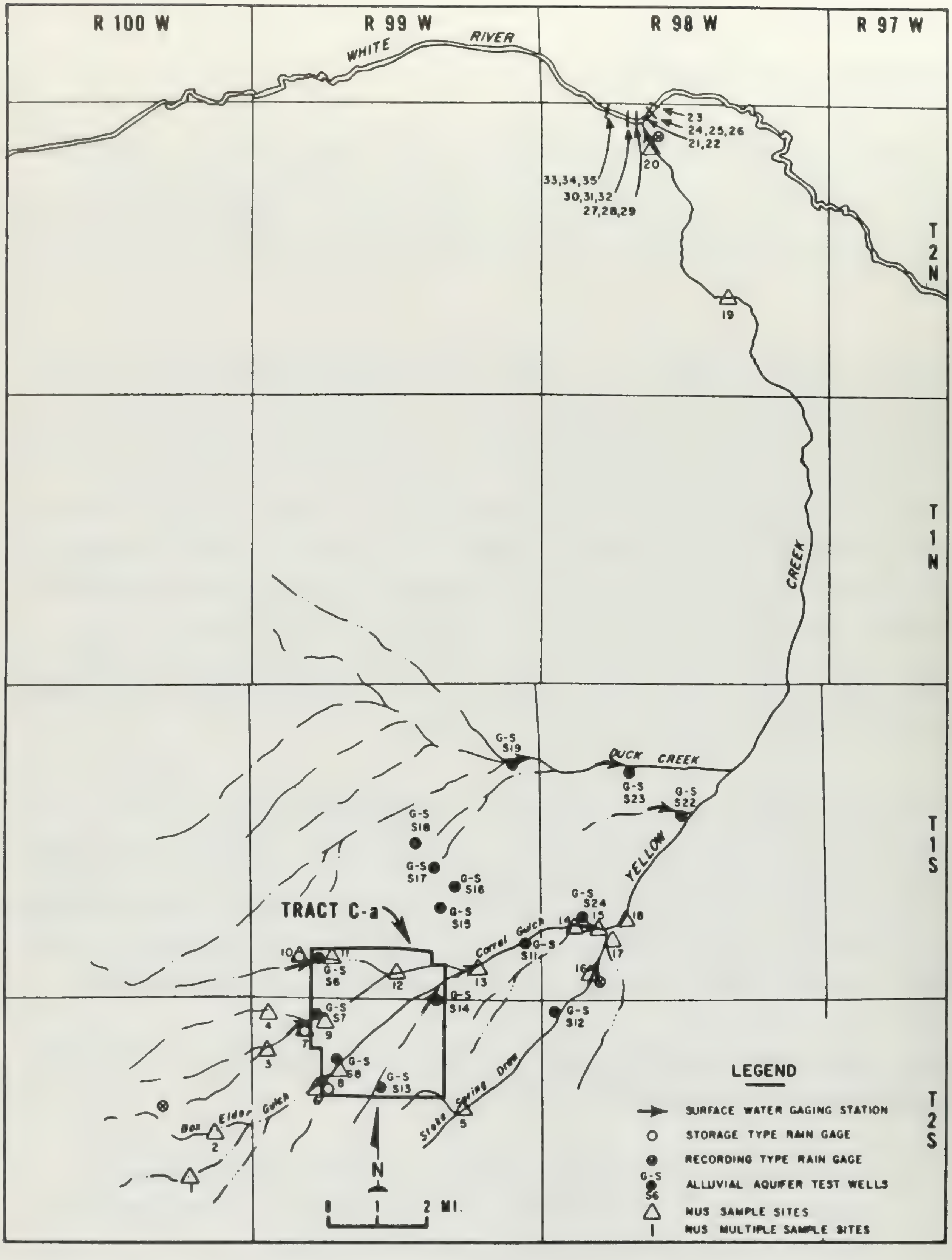



FIGURE 48

LOCATIONS OF AQUATIC SAMPLING SITES

- Yellow Creek - The sampling station is near the USGS gaging station now located on Yellow Creek near the White River. This station corresponds to aquatic baseline sampling Station Number 20.

- White River - This sampling station is located in a side channel approximately 30 m downstream from the confluence of the White River and Yellow Creek. This station corresponds to aquatic baseline sampling Station Number 29.

During the baseline monitoring program, fish were found throughout the year in the White River and occasionally in the extreme lower reaches of Yellow Creek. The Yellow Creek and White River stations are located more than 18 miles from Tract C-a. Since substantial information was collected on these fish populations during the baseline program, additional data collection was not included in the interim monitoring program. During the RBOSP interim aquatic studies, samples were collected on two dates: December 6, 1976, and April 25, 1977. The results of analysis of those samples are presented in the following paragraphs. (Methods used in these interim studies were described in the RBOSP Semi-Annual Report of March 1977 and will not be repeated here).

# CHAPTER 1 - PERIPHYTON

## 1.1 OBJECTIVES

The objective of the periphyton studies during RBOSP interim aquatic monitoring was to provide data that could be used to show trends or changes in the periphyton communities on or near Tract C-a for comparison with baseline data.

## 1.2 METHODS

Methods used in periphyton studies during the RBOSP interim monitoring period were described in the RBOSP interim environmental studies Semi-Annual Report of March 1977, and they will not be repeated here.

## 1.3 RESULTS

Periphyton species observed in the April 1977, RBOSP interim aquatic sampling are listed in Table 30. Densities of the algae are presented in Table 31. Table 32 presents a comparison of the dominant species observed during RBOSP aquatic interim and baseline studies.

Station 13 is an alkaline spring brook habitat in which diatoms have been the predominant algal species during the April sampling period of baseline and interim studies. In April 1975, April 1976, and April 1977, the total number of algal species observed in the periphyton was 24, 26, and 17, respectively. As is evident from Table 32,although some changes in dominant species have been observed from year to year, several diatoms have been consistently among the predominant species. These diatoms include *Achnanthes minutissima*, *A. lanceolata*, *Gomphonema intricatum*, *Navicula arvensis*, and *N. Cryptocephala*.

*Achnanthes minutissima* is an indicator of high oxygen concentrations in alkaline waters (Lowe 1974). Such physicochemical conditions have been consistently observed at Station 13 during aquatic baseline and interim studies.

*Navicula cryptocephala* and *Gomphonema intricatum* are both characterized as cosmopolitan species which reach highest densities in alkaline waters (Lowe 1974).

Station 20 is located in Yellow Creek; this habitat is a slightly brackish (high alkalinity and conductivity) spring brook. This spring brook segment also generally carries large quantities of organic matter. The algal species in this segment of Yellow Creek may be characterized as alkaliphilous.

As evident from Table 32, the dominant algal species at this station during the baseline and interim periods have been diatoms. In April 1975, April 1976, and April 1977, the total number of algal species observed at Station 20 was 18, 19, and 20, respectively. Although the dominant species have been different from year to year, several diatoms have been among the dominant taxa during two or more April sampling periods. These species include *Achnanthes minutissima*, *Navicula pelliculosa*, *N. cryptocephala*, *Nitzschia capitellata*, and *Surirella ovata*.

TABLE 30

ALGAL SPECIES IDENTIFIED IN PERIPHYTON COMMUNITIES DURING RBOSP AQUATIC INTERIM STUDIES, APRIL 1977

---

CYANOPHYTA

*Lyngbya* sp.

CHRYSOPHYTA

*Bicoeca lacustris*
*Thalassiosira fluviatilis*
*Cyclotella meneghiniana*
*Stephanodiscus astraea*
*Diatoma vulgare*
*Meridion circulare*
*Fragilaria pinnata*
*F. vaucheriae*
*Synedra amphicephala*
*S. pulchella*
*S. ulna*
*Cocconeis pediculus*
*Achnanthes lanceolata*
*A. minutissima*
*Pleurosigma delicatulum*
*Navicula arvensis*
*N. gregaria*
*N. heufleri*
*N. mutica*
*N. pelliculosa*
*N. salinarum*
*N. salinarum* var. *intermedia*
*N. viridula*
*Caloneis bacillum*
*Cymbella affinis*
*C. mexicana*
*C. microcephala*
*C. pusilla*
*C. sinuata*
*C. ventricosa*
*Gomphonema intricatum*
*G. olivaceum*
*G. ventricosum*
*Epithemia sorex*
*E. turgida*
*Rhopalodia gibba*
*Nitzschia capitellata*
*N. dissipata*
*N. frustulum*
*N. linearis*
*N. microcephala*
*N. palea*

TABLE 30(Continued)

CHRYSOPHYTA (Continued)

*N. tryblionella*
*Surirella ovata*
*S. ovalis*

TABLE 31

DENSITIES OF ALGAL SPECIES OBSERVED IN THE PERIPHYTON DURING APRIL RBOSP INTERIM STUDIES. (Data are expressed in organisms/$mm^2$)

STATION 13

| Taxa | Replicate A | Replicate B | Mean |
|---|---|---|---|
| CYANOPHYTA | | | |
| *Lyngbya* sp | 144 | 378 | 261 |
| CHRYSOPHYTA | | | |
| *Achnanthes lanceolata* | 27 | 162 | 95 |
| *A. minutissima* | 531 | 3,042 | 1,787 |
| *Bicoeca lacustris* | 1,449 | 1,431 | 1,440 |
| *Caloneis bacillum* | | 9 | 5 |
| *Cymbella affinis* | 27 | 54 | 41 |
| *C. microcephala* | 27 | 9 | 18 |
| *Fragilaria vaucheriae* | 54 | 135 | 95 |
| *Gomphonema intricatum* | 1,683 | 3,249 | 2,466 |
| *Meridion circulare* | 99 | 162 | 131 |
| *Navicula arvensis* | 234 | 378 | 306 |
| *N. cryptocephala* | 63 | 117 | 90 |
| *N. viridula* | 81 | 90 | 86 |
| *Nitzschia capitellata* | 54 | 36 | 45 |
| *N. frustulum* | 27 | 18 | 23 |
| *Synedra amphicephala* | | 45 | 23 |
| *S. ulna* | 1 | 4 | 3 |

TABLE 31 (Continued)

STATION 20

| Taxa | Replicate A | Replicate B | Mean |
|---|---|---|---|
| CHRYSOPHYTA | | | |
| Achnanthes lanceolata | 14 | | 7 |
| A. minutissima | 126 | 1,224 | 675 |
| Cyclotella meneghiniana | 7 | 68 | 38 |
| Cymbella affinis | | 68 | 34 |
| Fragilaria vaucheriae | 7 | | 4 |
| Gomphonema intricatum | 49 | | 25 |
| G. olivaceum | | 136 | 68 |
| Navicula arvensis | 56 | | 28 |
| N. cryptocephala | 7 | 272 | 140 |
| N. gregaria | | 68 | 34 |
| N. pelliculosa | 8,813 | 33,796 | 21,305 |
| N. salinarum | - | 68 | 34 |
| Nitzschia capitellata | 315 | 3,536 | 1,926 |
| N. frustulum | 126 | 2,584 | 1,355 |
| N. microcephala | | 476 | 238 |
| N. tryblionella | | 68 | 34 |
| Surirella ovata | 35 | 272 | 154 |
| Synedra amphicephala | 35 | | 18 |
| S. pulchella | | 3 | 2 |
| Thalassiosira fluviatalis | 7 | | 4 |

TABLE 31 (Continued)

STATION 29

| Taxa | Replicate A | Replicate B | Mean |
|---|---|---|---|
| CYANOPHYTA | | | |
| Lyngbya spp | 274 | 560 | 417 |
| CHRYSOPHYTA | | | |
| Achnanthes lanceolata | 4 | 7 | 6 |
| A. minutissima | 18 | 98 | 58 |
| Amphiprora alata | | 7 | 4 |
| Cocconeis pediculus | | 7 | 4 |
| Cyclotella meneghiniana | 9 | 21 | 15 |
| Cymbella affinis | | 63 | 32 |
| C. pusilla | | 14 | 7 |
| C. sinuata | 4 | | 2 |
| C. ventricosa | 9 | 14 | 12 |
| Diatoma vulgare | | 14 | 7 |
| Epithemia sorex | 18 | 182 | 100 |
| E. turgida | | 7 | 4 |
| Fragilaria pinnata | | 28 | 14 |
| F. vaucheriae | | 35 | 18 |
| Gomphonema intricatum | 22 | 14 | 18 |
| G. olivaceum | | 28 | 14 |
| G. ventricosum | | 7 | 4 |
| Navicula arvensis | 72 | 35 | 54 |
| N. cryptocephala | 90 | 511 | 301 |
| N. heufleri | 9 | | 5 |
| N. mutica | | 7 | 4 |
| N. pelliculosa | 27 | | 14 |
| N. salinarum var. intermedia | 9 | 49 | 29 |
| N. tripunctata | | 56 | 28 |
| N. viridula | 18 | 609 | 314 |
| Nitzschia capitellata | 9 | 14 | 12 |
| N. dissipata | 36 | 119 | 78 |
| N. frustulum | 22 | 14 | 18 |
| Surirella ovalis | 4 | | 2 |
| S. ovata | | 21 | 11 |
| Synedra ulna | | 2 | 1 |
| Thalassiosira fluviatilis | 4 | 7 | 6 |

TABLE 32

COMPARISON OF MEAN DENSITIES OF THE DOMINANT ALGAL SPÊCIES OBSERVED IN THE PERIPHYTON DURING SAMPLING, RBOSP INTERIM STUDIES (April 1977) AND RBOSP AQUATIC BASELINE STUDIES (1974 - 1975). (Densities are expressed in cells/$mm^2$).

STATION 13

| Taxa | 1975 | 1976 | 1977 |
|---|---|---|---|
| CYANOPHYTA | | | |
| Lyngbya spp | | | 261 |
| CHRYSOPHYTA | | | |
| Achnanthes lanceolata | 288 | 755 | 95 |
| A. minutissima | 4,481 | 14,765 | 1,787 |
| Bicoeca lacustris | | 631 | 1,440 |
| Fragilaria vaucheriae | | | 95 |
| Gomphonema intricatum | 98 | 12,929 | 2,466 |
| Meridion circulare | | 3,240 | 131 |
| Navicula arvensis | 69 | 858 | 306 |
| N. cryptocephala | 830 | 2,081 | 90 |
| N. pelliculosa | | 15,230 | |
| N. viridula | | | 86 |
| Nitzschia capitellata | | 1,008 | |
| N. denticula | 45 | | |
| N. frustulum | 125 | | |
| N. holsatica | | 302 | |

STATION 20

| Taxa | 1975 | 1976 | 1977 |
|---|---|---|---|
| CHYRSOPHYTA | | | |
| Achnanthes minutissima | 1,337 | | 675 |
| Cyclotella meneghiniana | | | 38 |
| Cymbella affinis | 63 | | 34 |
| Fragilaria vaucheriae | 108 | 48 | |
| Gomphonema olivaceum | | | 68 |
| Navicula cryptocephala | | 35 | 140 |
| N. gregaria | | | 34 |
| N. pelliculosa | 578 | 1,334 | |
| N. salinarum | | | 34 |
| Nitzschia capitellata | | 190 | 1,926 |
| N. frustulum | | | 1,355 |
| N. holsatica | | 80 | |
| N. microcephala | | | 238 |
| N. palea | 45 | | 84 |
| N. tryblionella | | | 34 |
| Surirella ovata | 243 | 1,035 | 154 |
| Synedra amphicephala | | 1,350 | |
| S. pulchella | | 25 | |

TABLE 32 (Continued)

STATION 29

| Taxa | 1975 | 1976 | 1977 |
|---|---|---|---|
| CYANOPHYTA | | | |
| *Lyngbya* spp | 259 | | 417 |
| *Plectonema* spp | 1,024 | | |
| *Calothrix* spp | 979 | | |
| CHYRYSOPHYTA | | | |
| *Achnanthes minutissima* | 731 | | 58 |
| *Amphora ovalis* var *pediculus* | 79 | 874 | |
| *Cymbella affinis* | | | 32 |
| *C. sinuata* | | 187 | |
| *Epithemia sorex* | 1,192 | 117 | 100 |
| *Navicula arvensis* | | | 54 |
| *N. cryptocephala* | 889 | 540 | 301 |
| *N. pelliculosa* | | 82 | |
| *N. salinarum* var *intermedia* | | | 29 |
| *N. tripunctata* | 292 | 204 | 28 |
| *N. viridula* | 1,204 | 2,737 | 314 |
| *Nitzschia dissipata* | 1,474 | | 78 |
| *N. frustulum* | | 187 | |
| *Gomphonema olivaceum* | 574 | 1,115 | 986 |
| *Surirella ovata* | | 243 | |

Surirella ovata is reported to be an alkaliphilous species that attains optimum development during the winter in running waters which have a pH of 7.5 to 8 (Lowe 1974). As noted previously, Achnanthes minutissima, Navicula cryptocephala, and Gomphonema intricatum are also indicators of alkaline waters.

The dominant algal species in the periphyton at Station 29 during the baseline and interim monitoring periods have been diatoms and blue-green algae. In April 1974, April 1976, and April 1977; the total number of algal species observed at Station 29 was 45, 40, and 34, respectively. Although some shifts in the dominant species have been observed from year to year, several species have been consistently among the most abundant. These species include the blue-green algae Lyngbya spp; and the diatoms Epithemia sorex, Navicula cryptocephala, N. tripunctata, N. viridula, and Gomphonema olivaceum. Station 29 is located in a back channel area of the White River below the confluence with Yellow Creek. This area of the White River is characterized by a sand, gravel, and detritus-cobble substrate with relatively high velocity.

During the interim study period, periphyton densities and species composition at the three sampling locations were generally similar to those observed during the two-year baseline study period, although some changes in the dominant taxa were observed from year to year at each station. The degree of species composition variation from year to year appears to be similar.

# CHAPTER 2 - BENTHOS

## 2.1 OBJECTIVES

The objective of the benthos studies during RBOSP interim aquatic monitoring was to provide data concerning trends or changes in the benthic communities on or near Tract C-a for comparison with baseline data.

## 2.2 METHODS

Methods used in benthos studies during the RBOSP interim monitoring period were described in the RBOSP interim environmental studies Semi-Annual Report of March 1977, and they will not be repeated here.

## 2.3 RESULTS

Benthic macroinvertebrate taxa observed in the April RBOSP interim aquatic sampling are listed in Table 33; macroinvertebrate densities observed in April are presented in Table 34. The dominant macroinvertebrate taxa observed during RBOSP aquatic interim and baseline studies are presented in Table 35.

At Station 13, the total number of macroinvertebrate taxa observed in April 1975, April 1976, and April 1977 were 35, 11, and 22, respectively. During all three sampling periods, the genera of the Chironomidae were the most abundant taxa at this station.

Station 13 may be characterized as an alkaline springbrook habitat with a substrate composed of gravel, sand, and silt. There is little macrophytic growth here, but periphyton covers the gravel and other substrates. This type of habitat favors the development of Chironomidae. Aquatic insects which occur in the springbrook habitats on and near Tract C-a have univoltine (one generation/year) or multivoltine (more than one generation/year) life cycles. Aquatic insects which require two or three years for development have not been successful in invading these waters.

At Station 20, the total number of macroinvertebrate taxa observed in April 1975, April 1976, and April 1977 were 23, 18, and 19, respectively. During all three sampling periods the most abundant macroinvertebrates were the Chironomidae, Oligochaeta, and Simuliidae.

Station 20, located in Yellow Creek, is characterized by a substrate of gravel and sand and by slightly brackish (high alkalinity and conductivity) chemical conditions.

TABLE 33

MACROINVERTEBRATE TAXA IDENTIFIED
DURING RBOSP AQUATIC INTERIM STUDIES DURING
APRIL 1977.

---

- Nematoda

- Annelida
  - Oligochaeta
    - Haplotaxida
      - Haplotaxidae
        - *Haplotaxis* sp
      - Enchytraeidae
      - Tubificidae
        - Unidentified sp 1
        - Unidentified sp 2
        - Unidentified sp 3
        - *Limnodrilus hoffmeisteri*
        - *L. udekemianus*
        - Immatures with capilliform chaetae
        - Immatures without capilliform chaetae
      - Naididae
        - *Chaetogaster diastrophus*
        - *Nais* sp
        - *N. behningi*

- Arthropoda
  - Arachnoida
    - Acari
  - Insecta
    - Ephemeroptera
      - Baetidae
        - *Baetis* sp
      - Heptageniidae
        - *Rhithrogena* sp
      - Ephemerellidae
        - *Ephemerella* sp
      - Tricorythidae
        - *Tricorythodes* sp
    - Odonata
      - Zygoptera
      - Anisoptera
        - Gomphidae
          - *Ophiogomphus* sp
    - Plecoptera
    - Systellognantha
      - Perlodidae
        - *Isoperla* sp

TABLE 33(Continued)

Perlidae
    *Claassenia sabulosa*
Coleoptera
    Dytiscidae
    Elmidae
Trichoptera
    Hydropsychidae
        *Cheumatopsyche* sp
        *Hydropsyche* sp
    Hydroptilidae
Diptera
    Tipulidae
        *Dicranota* sp
        *Hexatoma* sp
    Ceratopogonidae
    Chironomidae
      Pentaneurini
        *Thienemannimyia* group
    Diamesinae
        *Diamesa*
    Orthocladiinae
        *Chaetocladius*
        *Corynoneura*
        *Cricotopus* (*Cricotopus*)
        *C.* (*C.*) *trifascia*
        *Eukiefferiella*
        *Nanocladius*
        *Orthocladiinae*
        *Orthocladius*
        *O.* (*Euorthocladius*)
        *Parakiefferiella*
        *Parametriocnemus*
        *Paraphaenocladius*
        *Thienemanniella*
    Chironominae
      Chironomini
        *Polypedilum* (*Polypedilum*) sp
        *P.* (*P.*) *fallax* group
      Tanytarsini
        *Micropsectra*
        *Rheotanytarsus*
        *Tanytarsus*
    Simuliidae
        *Simulium* sp
    Empididae

TABLE 34

DENSITIES OF MACROINVERTEBRATES OBSERVED DURING RBOSP AQUATIC INTERIM STUDIES DURING APRIL 1977. (Densities are expressed as organisms/m$^2$.)

STATION 13

| | Replicate A | Replicate B | Mean |
|---|---|---|---|
| Nematoda | | 18 | 9 |
| Annelida | | | |
| Oligochaeta | 308 | 3,258 | 1,720 |
| Haplotaxida | | | |
| Haplotaxidae | | | |
| *Haplotaxis* sp | | 18 | 9 |
| Enchytraeidae | | 36 | 18 |
| Tubificidae | | | |
| Unidentified sp 1 | | | |
| Unidentified sp 2 | | | |
| Unidentified sp 3 | | 18 | 9 |
| *Limnodrilus hoffmeisteri* | | | |
| *L. udekemianus* | | | |
| Immatures with capilliform chaetae | | | |
| Immatures without capilliform chaetae | 18 | 18 | 18 |
| Naididae | | | |
| *Chaetogaster diastrophus* | 18 | | 9 |
| *Nais* sp | 272 | 3,168 | 1,720 |
| *N. behningi* | | | |
| Arthropoda | | | |
| Arachnoida | | | |
| Acari | 18 | 18 | 18 |
| Insecta | | | |
| Emphemeroptera | | | |
| Baetidae | | 18 | 9 |
| *Baetis* sp | 54 | 54 | 54 |
| Heptageniidae | | | |
| *Rhithrogena* sp | | | |
| Ephemerellidae | | | |
| *Ephmerella* sp | | | |
| Tricorythidae | | | |
| *Tricorythodes* sp | | | |
| Odonata | | | |
| Zygoptera | | | |
| Anisoptera | | | |
| Gomphidae | | | |
| *Ophiogomphus* sp | | | |
| Plecoptera | | | |
| Systellonantha | | | |
| Perlodidae | | | |
| *Isoperla* sp | 344 | 1,430 | 887 |

TABLE 34 (Continued)

STATION 13 (Continued)

| | Replicate A | Replicate B | Mean |
|---|---|---|---|
| Perlidae | | | |
| Claassenia sabulosa | | | |
| Coleoptera | | | |
| Dytiscidae | | 109 | 55 |
| Elmidae | | | |
| Trichoptera | | | |
| Hydropsychidae | | | |
| Cheumatopsyche sp | | | |
| Hydropsyche sp | | | |
| Hydroptilidae | | | |
| Diptera | | | |
| Tipulidae | | | |
| Dicranota sp | | 36 | 18 |
| Hexatoma sp | | | |
| Ceratopogonidae | 18 | 109 | 64 |
| Chironomidae | 6,517 | 34,101 | 20,245 |
| Pentaneurini | | 235 | 118 |
| Thienemannimyia group | 235 | 235 | 235 |
| Diamesi | | | |
| Diamesa | 471 | 2,082 | 1,276 |
| Orthocladiinae | | | |
| Chaetocladius | 54 | 235 | 145 |
| Corynoneura | | | |
| Cricotopus (Cricotopus) | | | |
| C. (C.) trifascia | | | |
| Eukiefferiella | 145 | | 72 |
| Nanocladius | | | |
| Orthocladiinae | 525 | 3,910 | 2,217 |
| Orthocladius | 3,059 | 12,435 | 7,747 |
| O. (Euorthocladius) | 290 | 2,534 | 1,412 |
| Parakiefferiella | 91 | 235 | 163 |
| Parametriocnemus | 869 | 8,978 | 4,923 |
| Paraphaenocladius | | | |
| Thienemanniella | 380 | 688 | 534 |
| Chironominae | | | |
| Chironomini | | | |
| Polypedilum (Polypedilum) sp | | | |
| P. (P.) fallax group | 54 | 453 | 253 |
| Tanytarsini | | | |
| Micropsectra | 290 | 1,846 | 1,068 |
| Rheotanytarsus | | | |
| Tanytarsus | 54 | 235 | 145 |
| Simuliidae | | | |
| Simulium sp | | | |
| Empididae | 652 | 977 | 815 |

TABLE 34 (Continued)

STATION 20

| | Replicate A | Replicate B | Mean |
|---|---|---|---|
| Nematoda | 217 | 525 | 371 |
| Annelida | | | |
| Oligochaeta | 36 | 271 | 154 |
| Haplotaxida | | | |
| Haplotaxidae | | | |
| *Haplotaxis* sp | | | |
| Enchytraeidae | | | |
| Tubificidae | | | |
| Unidentified sp 1 | | 18 | 9 |
| Unidentified sp 2 | | | |
| Unidentified sp 3 | | | |
| *Limnodrilus hoffmeisteri* | | 18 | 9 |
| *L. udekemianus* | | 36 | 18 |
| Immatures with capilliform chaetae | | 36 | 18 |
| Immatures without capilliform chaetae | 36 | 163 | 100 |
| Naididae | | | |
| *Chaetogaster diastrophus* | | | |
| *Nais* sp | | | |
| *N. behningi* | | | |
| Arthropoda | | | |
| Arachnoida | | | |
| Acari | 127 | 54 | 91 |
| Insecta | | | |
| Emphemeroptera | | | |
| Baetidae | | | |
| *Baetis* sp | | | |
| Heptageniidae | | | |
| *Rhithrogena* sp | | 18 | 9 |
| Ephemerellidae | | | |
| *Ephmerella* sp | | | |
| Tricorythidae | | | |
| *Tricorythodes* sp | | | |
| Odonata | | | |
| Zygoptera | | | |
| Anisoptera | | | |
| Gomphidae | | | |
| *Ophiogomphus* sp | | | |
| Plecoptera | | | |
| Systellonantha | | 18 | 9 |
| Perlodidae | | | |
| *Isoperla* sp | | | |

TABLE 34 (Continued)

STATION 20 (Continued)

| | Replicate A | Replicate B | Mean |
|---|---|---|---|
| Perlidae | | | |
| Claassenia sabulosa | | | |
| Coleoptera | | | |
| Dytiscidae | | | |
| Elmidae | | | |
| Trichoptera | | | |
| Hydropsychidae | | | |
| Cheumatopsyche sp | | | |
| Hydropsyche sp | | | |
| Hydroptilidae | | | |
| Diptera | | | |
| Tipulidae | | | |
| Dicranota sp | | | |
| Hexatoma sp | | | |
| Ceratopogonidae | | | |
| Chironomidae | 3,239 | 1,936 | 2,588 |
| Pentaneurini | | | |
| Thienemannimyia group | 36 | | 18 |
| Diamesiane | | | |
| Diamesa | | | |
| Orthocladiinae | | | |
| Chaetocladius | | | |
| Corynoneura | | | |
| Cricotopus (Cricotopus) | 199 | 398 | 299 |
| C. (C.) trifascia | | | |
| Eukiefferiella | 163 | 163 | 163 |
| Nanocladius | | | |
| Orthocladiinae | 72 | 72 | 72 |
| Orthocladius | 2,733 | 1,249 | 1,991 |
| O. (Euorthocladius) | | | |
| Parakiefferiella | | | |
| Parametriocnemus | | | |
| Paraphaenocladius | 36 | 54 | 45 |
| Thienemanniella | | | |
| Chironominae | | | |
| Chironomini | | | |
| Polypedilum (Polypedilum) sp | | | |
| P. (P.) fallax group | | | |
| Tanytarsini | | | |
| Micropsectra | | | |
| Rheotanytarsus | | | |
| Tanytarsus | | | |
| Simuliidae | 833 | 905 | 869 |
| Simulium sp | 145 | 127 | 136 |
| Empididae | | | |

TABLE 34 (Continued)

STATION 29

| | Replicate A | Replicate B | Mean |
|---|---|---|---|
| Nematoda | 36 | 235 | 136 |
| Annelida | | | |
| Oligochaeta | 614 | 180 | 397 |
| Haplotaxida | | | |
| Haplotaxidae | | | |
| *Haplotaxis* sp | | | |
| Enchytraeidae | 18 | | 9 |
| Tubificidae | | | |
| Unidentified sp 1 | | 18 | 9 |
| Unidentified sp 2 | | | |
| Unidentified sp 3 | | | |
| *Limnodrilus hoffmeisteri* | 90 | 18 | 54 |
| *L. udekemianus* | | | |
| Immatures with capilliform chaetae | | | |
| Immatures without capilliform chaetae | 326 | 90 | 208 |
| Naididae | | | |
| *Chaetogaster diastrophus* | | | |
| *Nais* sp | | | |
| *N. behningi* | 180 | 54 | 118 |
| Arthropoda | | | |
| Arachnoida | | | |
| Acari | | | |
| Insecta | | | |
| Emphemeroptera | | | |
| Baetidae | 2,516 | 977 | 1,747 |
| *Baetis* sp | | | |
| Heptageniidae | | | |
| *Rhithrogena* sp | 72 | 72 | 72 |
| Ephemerellidae | | | |
| *Ephmerella* sp | 5,231 | 1,285 | 3,258 |
| Tricorythidae | | | |
| *Tricorythodes* sp | 54 | | 27 |
| Odonata | | | |
| Zygoptera | 18 | | 9 |
| Anisoptera | | | |
| Gomphidae | | | |
| *Ophiogomphus* sp | 18 | | 9 |
| Plecoptera | 1,303 | 163 | 733 |
| Systellonantha | | | |
| Perlodidae | | | |
| *Isoperla* sp | 1,050 | 453 | 752 |

TABLE 34 (Continued)

STATION 29 (Continued)

| | Replicate | | |
|---|---|---|---|
| | A | B | Mean |
| Perlidae | | | |
| Claassenia sabulosa | 91 | 18 | 55 |
| Coleoptera | | | |
| Dytiscidae | | | |
| Elmidae | | 18 | 9 |
| Trichoptera | | | |
| Hydropsychidae | 380 | 54 | 217 |
| Cheumatopsyche sp | 54 | | 27 |
| Hydropsyche sp | 1,014 | 163 | 589 |
| Hydroptilidae | 36 | | 18 |
| Diptera | | | |
| Tipulidae | | | |
| Dicranota sp | | | |
| Hexatoma sp | 54 | 109 | 82 |
| Ceratopogonidae | | | |
| Chironomidae | 1,211 | 1,120 | 1,166 |
| Pentaneurini | | | |
| Thienemannimyia group | 18 | | 9 |
| Diamesiane | | | |
| Diamesa | | | |
| Orthocladiinae | | | |
| Chaetocladius | | | |
| Corynoneura | 18 | | 9 |
| Cricotopus (Cricotopus) | 36 | 180 | 109 |
| C. (C.) trifascia | 18 | | 9 |
| Eukiefferiella | 778 | 72 | 425 |
| Nanocladius | 18 | | 9 |
| Orthocladiinae | 54 | 108 | 81 |
| Orthocladius | 199 | 552 | 362 |
| O. (Euorthocladius) | | 127 | 63 |
| Parakiefferiella | | 18 | 9 |
| Parametriocnemus | | 18 | 9 |
| Paraphaenocladius | | 18 | 9 |
| Thienemanniella | | | |
| Chironominae | | | |
| Chironomini | | | |
| Polypedilum (Polypedilum) sp | 18 | | 9 |
| P. (P.) fallax group | | 18 | 9 |
| Tanytarsini | | | |
| Micropsectra | | | |
| Rheotanytarsus | 54 | 36 | 45 |
| Tanytarsus | | | |
| Simuliidae | 199 | 36 | 118 |
| Simulium sp | 36 | | 13 |
| Empididae | 36 | | 18 |

TABLE 35

COMPARISON OF MOST ABUNDANT BENTHIC MACROINVERTEBRATE TAXA OBSERVED DURING RBOSP AQUATIC INTERIM STUDIES (April 1977) AND RBOSP AQUATIC BASELINE STUDIES (April 1975 and 1976).

STATION 13

| Taxa | Year 1975 | 1976 | 1977 |
|---|---|---|---|
| Nematoda | 241 | 24 | 9 |
| Oligochaeta | 96 | 18 | 1,720 |
| Acari | | | 18 |
| Baetidae | 440 | 115 | 9 |
| *Baetis* sp | 2,245 | 24 | 54 |
| Coenagrionidae | | 6 | |
| *Isoperla* sp | 91 | 24 | 887 |
| Dytiscidae | | | 55 |
| *Ormosia* sp | | 6 | |
| *Dicranota* sp | | | 18 |
| *Holorusia* sp | | 36 | |
| Ceratopogonidae | 416 | 18 | 64 |
| Chironomidae | 10,896 | 1,961 | 20,245 |
| Empididae | | 6 | 45 |
| *Hemerodromia* | 60 | | |

STATION 20

| Taxa | Year 1975 | 1976 | 1977 |
|---|---|---|---|
| Nematoda | 145 | 320 | 371 |
| Oligochaeta | 627 | 2,353 | 154 |
| Acari | 217 | | 91 |
| Collembola | | 6 | |
| *Rhithrogena* sp | | | 9 |
| Plecoptera | | | 9 |
| Ceratopogonidae | 2,299 | 72 | 100 |
| Chironomidae | 5,750 | 1,002 | 2,588 |
| Simuliidae | 1,762 | 24 | 869 |
| *Simulium* sp | 97 | | 136 |
| *Chrysop* sp | | 6 | |
| Coenagrionidae | 12 | | |

TABLE 35 (Continued)

STATION 29

| Taxa | Year 1975 | 1976 | 1977 |
|---|---|---|---|
| Nematoda | 117 | 20 | 136 |
| Oligochaeta | 1,615 | 852 | 397 |
| Baetidae | 26 | 39 | 1,747 |
| *Baetis* sp | 52 | 13 | |
| *Rhithrogena* | 33 | 260 | 72 |
| *Ephemerella* sp | 631 | 293 | 3,258 |
| Plecoptera | | 33 | 733 |
| *Isoperla* sp | 91 | 124 | 752 |
| Hydropsychidae | 33 | 7 | 217 |
| *Hydropsyche* sp | 156 | 7 | 589 |
| Ceratopogonidae | 52 | 13 | 36 |
| Chironomidae | 1,331 | 46 | 1,166 |
| Simuliidae | | | 118 |
| Acari | 26 | | |

The number of benthic taxa which can tolerate these chemical conditions is limited. Those taxa which can tolerate the chemical conditions, particularly the Chironomidae and Simuliidae, occur in great abundance.

At Station 29, the total number of macroinvertebrate taxa observed in April 1975, April 1976, and April 1977 were 46, 23, and 31, respectively. During April in all three years, the dominant taxa were *Ephemerella* sp, Chironomidae, and *Oligochaeta*.

Station 29 is located in a back channel area of the White River below the confluence with Yellow Creek. It is characterized as substrate of cobble, gravel, sand, and detritus. Relatively high stream velocities occur in this back channel. During periods of low flow in the White River, this back channel area becomes silted. Although densities of macroinvertebrates have generally been lower in this White River station than in Yellow Creek, the higher number of species can be attributed to more suitable substrates, greater current velocities, less severe chemical conditions, and greater drift resource for upstream areas of the White River.

During the interim study period, the species composition at the three sampling locations were generally similar to those observed during the two-year baseline period. Some changes in the dominant taxa were observed from year to year at each station, but the general species composition remained similar.

## CHAPTER 3 - PHYSICAL CONDITIONS

### 3.1 OBJECTIVES

The objectives of taking physical measurements during RBOSP interim aquatic monitoring is to relate the physical conditions in these aquatic habitats to the conditions observed during aquatic baseline studies.

## 3.2 METHODS

Methods used in these studies during the RBOSP interim monitoring period were described in the RBOSP interim environmental studies Semi-Annual Report of March 1977, and they will not be repeated here.

## 3.3 RESULTS

A comparison of the results of physical measurements taken during RBOSP aquatic interim and baseline studies is presented in Table 36.

At Station 13, alkalinity, pH, and conductivity were higher in April 1975 than during April of 1976 or 1977. Also in 1975, water temperature and the dissolved oxygen concentration were lower than during April of 1976 or 1977. The differences in physicochemical conditions observed during 1975 may be attributed to discharges from hydrologic pump tests which were being conducted during that period.

At Station 20, the total alkalinity and conductivity were lower in April 1975 than during April 1976 or 1977, whereas the width of this stream segment was considerably greater in April 1975. The differences in physicochemical conditions in 1975 may be attributed to high flows resulting from snowmelt runoff. Such runoff produced dilution of conductivity and alkalinity values during that time.

At Station 29, alkalinity and conductivity values were lower in April 1977 than during April of 1975 and 1976. This is likely due to higher runoff and dilution during April 1977, as indicated by the greater stream width and depth observed in 1977.

TABLE 36

COMPARISON OF PHYSICOCHEMICAL DATA FROM RBOSP INTERIM STUDIES (April 1977) AND RBOSP AQUATIC BASELINE STUDIES (April 1975 - 1976).

STATION 13

| Parameter | Year 1975 | 1976 | 1977 |
|---|---|---|---|
| pH | 8.3 | 7.5 | 7.8 |
| Water temperature (°C) | 9 | 13 | 11 |
| Conductivity (µmhos/cm) | 1,730 | 1,150 | 1,300 |
| Dissolved oxygen (mg/l) | 5.2 | 7.8 | 9.1 |
| Alkalinity, total (mg/l) | 716 | 435 | 431 |
| Substrate type* | Gr, Si | Gr, Sa | Gr |
| Width (inches) | 36 | 48 | 18 |
| Depth (inches) | 3 | 4 | 3 |
| Velocity (ft/sec) (side; max.) | 1.0 | 1.4 | 0.9, 1.1 |

STATION 20

| Parameter | Year 1975 | 1976 | 1977 |
|---|---|---|---|
| pH | 8.6 | 8.7 | 8.6 |
| Water temperature (°C) | 14 | 19 | 6 |
| Conductivity (µmhos/cm) | 3,700 | 4,000 | 4,000 |
| Dissolved oxygen (mg/l) | 9.4 | 9.4 | 8.4 |
| Alkalinity, total (mg/l) | 1,291 | 1,632 | 1,628 |
| Substrate type* | Gr, Si, Sa | Gr, Sa | Gr |
| Width (inches) | 144 | 48 | 36 |
| Depth (inches) | 3.5 | 4 | 4 |
| Velocity (ft/sec) (side; max.) | 1.6; 1.0 | 1.1 | 1.0; 2.1 |

TABLE 36 (Continued)

STATION 29

| Parameter | Year 1975 | 1976 | 1977 |
|---|---|---|---|
| pH | 8.4 | 8.4 | 8.1 |
| Water temperature (°C) | 13 | 11 | 9 |
| Conductivity (µmhos/cm) | 850 | 893 | 550 |
| Dissolved oxygen (mg/l) | 10.1 | 10.5 | 8.9 |
| Alkalinity total (mg/l) | 207 | 186 | 137 |
| Substrate type * | Gr, D | Gr, Sa | Co, Gr. |
| Width (ft) | 21 | 25 | 27 |
| Depth (inches) (average) | 4 | 6 | 10 |
| Velocity (ft/sec) (side; max.) | 1.9; 3.6 | 1.9; 3.9 | 1.2; 4.0 |

*Co = Cobble
Gr = Gravel
Sa = Sand
D = Detritus
Si = Silt

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## LITERATURE CITED


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# APPENDICES

# SECTION I

AIR STUDIES
APPENDICES

# APPENDIX A

# AIR QUALITY

(Note: These appendices are incomplete. Additional data will be provided when strip chart reductions are completed).

AT STATION RIO BLANCO LEVEL 1

| SAMPLE DATE | TIME (HR) | UG/M3 | CODE |
|---|---|---|---|
| 77 212 | -0 | 6. | |
| 77 215 | -0 | 8. | |
| 77 218 | -0 | 11. | |
| 77 221 | -0 | 19. | |
| 77 224 | -0 | 8. | |
| 77 227 | -0 | 5. | |
| 77 3 2 | -0 | 5. | |
| 77 3 5 | -0 | 7. | |
| 77 3 8 | -0 | 33. | |
| 77 311 | -0 | 42. | |
| 77 314 | -0 | 18. | |
| 77 317 | -0 | 26. | |
| 77 320 | -0 | 19. | |
| 77 323 | -0 | 22. | |
| 77 326 | -0 | 9. | |
| 77 329 | -0 | 23. | |
| 77 4 1 | -0 | 18. | |
| 77 4 4 | -0 | 17. | |
| 77 4 7 | -0 | 11. | |
| 77 410 | -0 | 26. | |
| 77 413 | -0 | 11. | |
| 77 416 | -0 | 5. | |
| 77 419 | -0 | 18. | |
| 77 422 | -0 | 21. | |
| 77 425 | -0 | 40. | |
| 77 428 | -0 | 13. | |
| 77 5 1 | -0 | 25. | |
| 77 5 3 | -0 | 59. | |
| 77 5 7 | -0 | 48. | |
| 77 510 | -0 | 54. | |
| 77 512 | -0 | 47. | |
| 77 516 | -0 | 13. | |
| 77 519 | -0 | 14. | |
| 77 522 | -0 | 19. | |
| 77 525 | -0 | 25. | |
| 77 528 | -0 | 16. | |
| 77 531 | -0 | 15. | |
| 77 6 3 | -0 | 27. | |
| 77 6 5 | -0 | 32. | |
| 77 611 | -0 | 19. | |
| 77 614 | -0 | 26. | |
| 77 617 | -0 | | |
| 77 620 | -0 | 42. | |
| 77 623 | -0 | 42. | |
| 77 626 | -0 | 31. | |
| 77 629 | -0 | 27. | |
| 77 7 2 | -0 | 31. | |
| 77 7 5 | -0 | 14. | |
| 77 7 8 | -0 | 27. | |
| 77 711 | -0 | 23. | |

HIVOL SAMPLER(UG/M3) PAGE 2

AT STATION RIO BLANCO LEVEL 1

| SAMPLE DATE | TIME (HR) | UG/M3 | CODE |
|---|---|---|---|
| 77 714 | -0 | 27. | |
| 77 720 | -0 | 13. | |
| 77 723 | -0 | 8. | |
| 77 726 | -0 | 19. | |
| 77 729 | -0 | 31. | |
| 77 8 1 | -0 | 25. | |
| 77 8 4 | -0 | 18. | |
| 77 8 7 | -0 | 30. | |
| 77 810 | -0 | 47. | |
| 77 813 | -0 | 26. | |
| 77 816 | -0 | 8. | |
| 77 819 | -0 | 10. | |
| 77 822 | -0 | 18. | |
| 77 831 | -0 | 14. | |

DATA SUMMARY FOR HIVOL SAMPLER(UG/M3)

AT STATION RIO BLANCO LEVEL 1 FOR THE PERIOD 2/12/77 TO 8/31/77

ANNUAL

FOR CLASS INTERVAL WIDTH OF 1.0000 AND OFFSET 3.0000

THE PERCENTAGE OF OBSERVATIONS LESS THAN VALUE

| | |
|---|---|
| 1.59 | 5. |
| 4.76 | 6. |
| 7.94 | 7. |
| 11.11 | 8. |
| 15.87 | 9. |
| 17.46 | 10. |
| 20.63 | 11. |
| 22.22 | 12. |
| 26.98 | 13. |
| 30.16 | 14. |
| 31.75 | 15. |
| 34.92 | 16. |
| 36.51 | 17. |
| 41.27 | 18. |
| 46.03 | 19. |
| 52.38 | 20. |
| 55.56 | 22. |
| 58.73 | 23. |
| 60.32 | 25. |
| 65.08 | 26. |
| 71.43 | 27. |
| 76.19 | 28. |
| 82.54 | 31. |
| 85.71 | 33. |
| 87.30 | 40. |
| 92.06 | 42. |
| 95.24 | 47. |
| 96.83 | 48. |
| 98.41 | 54. |
| 100.00 | 59. |

THERE ARE 63 OBSERVATIONS

THE ARITHMETIC MEAN IS 22. WITH STANDARD DEVIATION OF 12.68. THE MAXIMUM VALUE WAS 59.UG/M3

THE GEOMETRIC MEAN IS 19. WITH STND GEO DEVIATION OF 1.84. THE MINIMUM VALUE WAS 5.UG/M3

THE SECOND MAXIMUM VALUE IS 41.900 UG/M3

AT STATION RIO BLANCO LEVEL 2

| SAMPLE DATE | TIME (HR) | UG/M3 | CODE |
|---|---|---|---|
| 77 212 | -0 | 7. | |
| 77 215 | -0 | 6. | |
| 77 218 | -0 | 10. | |
| 77 221 | -0 | 14. | |
| 77 224 | -0 | 4. | |
| 77 227 | -0 | 3. | |
| 77 3 2 | -0 | 6. | |
| 77 3 5 | -0 | | |
| 77 3 8 | -0 | 34. | |
| 77 311 | -0 | 31. | |
| 77 314 | -0 | 16. | |
| 77 317 | -0 | 26. | |
| 77 320 | -0 | 19. | |
| 77 323 | -0 | 19. | |
| 77 326 | -0 | | |
| 77 329 | -0 | 27. | |
| 77 4 1 | -0 | 18. | |
| 77 4 4 | -0 | 9. | |
| 77 4 7 | -0 | 11. | |
| 77 410 | -0 | 25. | |
| 77 413 | -0 | 12. | |
| 77 416 | -0 | 6. | |
| 77 419 | -0 | 23. | |
| 77 422 | -0 | 19. | |
| 77 425 | -0 | 29. | |
| 77 428 | -0 | 13. | |
| 77 5 1 | -0 | 25. | |
| 77 5 3 | -0 | 60. | |
| 77 5 7 | -0 | 50. | |
| 77 510 | -0 | 52. | |
| 77 512 | -0 | 43. | |
| 77 516 | -0 | 13. | |
| 77 519 | -0 | 13. | |
| 77 522 | -0 | 18. | |
| 77 525 | -0 | 11. | |
| 77 528 | -0 | 14. | |
| 77 531 | -0 | 14. | |
| 77 6 3 | -0 | 29. | |
| 77 6 5 | -0 | 33. | |
| 77 611 | -0 | 20. | |
| 77 614 | -0 | 29. | |
| 77 617 | -0 | 28. | |
| 77 620 | -0 | 43. | |
| 77 623 | -0 | 31. | |
| 77 626 | -0 | 29. | |
| 77 629 | -0 | 30. | |
| 77 7 2 | -0 | 26. | |
| 77 7 5 | -0 | 14. | |
| 77 7 8 | -0 | 22. | |
| 77 711 | -0 | 22. | |

HIVOL SAMPLER(UG/M3) PAGE 2

AT STATION RIO BLANCO LEVEL 2

| SAMPLE DATE | TIME (HR) | UG/M3 | CODE |
|---|---|---|---|
| 77 714 | -0 | 26. | |
| 77 720 | -0 | 12. | |
| 77 723 | -0 | 8. | |
| 77 726 | -0 | 14. | |
| 77 729 | -0 | 27. | |
| 77 8 1 | -0 | 19. | |
| 77 8 4 | -0 | 15. | |
| 77 8 7 | -0 | 30. | |
| 77 810 | -0 | 42. | |
| 77 813 | -0 | 23. | |
| 77 816 | -0 | 10. | |
| 77 819 | -0 | 7. | |
| 77 822 | -0 | 23. | |
| 77 831 | -0 | 14. | |

DATA SUMMARY FOR HIVOL SAMPLER(UG/M3)

AT STATION RIO BLANCO LEVEL 2 FOR THE PERIOD 2/12/77 TO 8/31/77

ANNUAL

FOR CLASS INTERVAL WIDTH OF10.0000 AND OFFSET10.0000

| THE PERCENTAGE OF OBSERVATIONS LESS THAN | VALUE |
|---|---|
| 17.74 | 10. |
| 53.23 | 20. |
| 83.87 | 30. |
| 90.32 | 40. |
| 96.77 | 50. |
| 98.39 | 60. |
| 100.00 | 70. |

THERE ARE 62 OBSERVATIONS

THE ARITHMETIC MEAN IS 21. WITH STANDARD DEVIATION OF 12.20. THE MAXIMUM VALUE WAS 60.UG/M3

THE GEOMETRIC MEAN IS 18. WITH STND GEO DEVIATION OF 1.88. THE MINIMUM VALUE WAS 3.UG/M3

THE SECOND MAXIMUM VALUE IS 33.700 UG/M3

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77020113 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020114 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020115 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020116 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020117 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020118 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020119 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020120 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020121 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | .5 | .062 |
| 77020122 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020123 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020124 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .055 |
| 77020201 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .051 |
| 77020202 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .051 |
| 77020203 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .047 |
| 77020204 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .047 |
| 77020205 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .047 |
| 77020206 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .047 |
| 77020207 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .051 |
| 77020208 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .051 |
| 77020209 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .055 |
| 77020210 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .055 |
| 77020211 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .055 |
| 77020212 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .055 |
| 77020213 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020214 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | .5 | .062 |
| 77020215 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | .5 | .066 |
| 77020216 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | .5 | .066 |
| 77020217 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | .5 | .066 |
| 77020218 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020219 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .058 |
| 77020220 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .058 |
| 77020221 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020222 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .058 |
| 77020223 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020224 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020301 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020302 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020303 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020304 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020305 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .066 |
| 77020306 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .066 |
| 77020307 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .066 |
| 77020308 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .066 |
| 77020309 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020310 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020311 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020312 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .062 |
| 77020313 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .066 |

## RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77020314 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | .5 | .069 |
| 77020315 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77020316 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020317 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020318 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020319 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77020320 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77020321 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020322 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020323 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020324 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020401 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020402 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020403 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020404 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020405 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .062 |
| 77020406 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .062 |
| 77020407 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020408 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020409 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020410 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020411 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .066 |
| 77020412 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020413 | .01 | .01 | 10.0 | 1.42 | .005 | .005 | .5 | .069 |
| 77020414 | .01 | .01 | 10.0 | 1.42 | .005 | .005 | .5 | .069 |
| 77020415 | .01 | .01 | 10.0 | 1.42 | .005 | .005 | .5 | .069 |
| 77020416 | .01 | .01 | 10.0 | 1.44 | .005 | .005 | .5 | .069 |
| 77020417 | .01 | .01 | 10.0 | 1.46 | .005 | .005 | .5 | .062 |
| 77020418 | .01 | .01 | 10.0 | 1.48 | .005 | .005 | .5 | .062 |
| 77020419 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .062 |
| 77020420 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020421 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020422 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .062 |
| 77020423 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .058 |
| 77020424 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020501 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020502 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020503 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020504 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020505 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020506 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020507 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020508 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020509 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020510 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020511 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020512 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020513 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .069 |
| 77020514 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77020515 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .069 |
| 77020516 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020517 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020518 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020519 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .066 |
| 77020520 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .062 |
| 77020521 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .062 |
| 77020522 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .066 |
| 77020523 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020524 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020601 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .073 |
| 77020602 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |
| 77020603 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020604 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020605 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020606 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .066 |
| 77020607 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .062 |
| 77020608 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .062 |
| 77020609 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .062 |
| 77020610 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .058 |
| 77020611 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .058 |
| 77020612 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .062 |
| 77020613 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .066 |
| 77020614 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | .5 | .069 |
| 77020615 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77020616 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77020617 | .01 | .01 | 10.0 | 1.44 | .005 | .005 | .5 | .069 |
| 77020618 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020619 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020620 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020621 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020622 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020623 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020624 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020701 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .069 |
| 77020702 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020703 | .01 | .01 | 1.5 | 1.54 | .005 | .005 | .5 | .066 |
| 77020704 | .01 | .01 | 1.6 | 1.58 | .005 | .005 | .5 | .066 |
| 77020705 | .01 | .01 | 1.5 | 1.54 | .005 | .005 | .5 | .066 |
| 77020706 | .01 | .01 | 1.6 | 1.54 | .005 | .005 | .5 | .066 |
| 77020707 | .01 | .01 | 1.6 | 1.56 | .005 | .005 | .5 | .066 |
| 77020708 | .01 | .01 | 1.6 | 1.54 | .005 | .005 | .5 | .066 |
| 77020709 | .01 | .01 | 1.6 | 1.54 | .005 | .005 | .5 | .066 |
| 77020710 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .062 |
| 77020711 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .062 |
| 77020712 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020713 | .01 | .01 | 10.0 | 1.48 | .005 | .005 | .5 | .066 |
| 77020714 | .01 | .01 | 10.0 | 1.46 | .005 | .005 | .5 | .069 |
| 77020715 | .01 | .01 | 10.0 | 1.44 | .005 | .005 | .5 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77020716 | .01 | .01 | 10.0 | 1.46 | .005 | .005 | .5 | .069 |
| 77020717 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020718 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020719 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020720 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020721 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020722 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020723 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020724 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .066 |
| 77020801 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020802 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .069 |
| 77020803 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020804 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020805 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020806 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020807 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020808 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020809 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020810 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020811 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020812 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020813 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77020814 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .073 |
| 77020815 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .073 |
| 77020816 | .01 | .01 | 10.0 | 1.48 | .005 | .005 | .5 | 7.293 |
| 77020817 | .01 | .01 | 10.0 | 1.48 | .005 | .005 | .5 | 7.293 |
| 77020818 | .01 | .01 | 10.0 | 1.50 | .005 | .005 | .5 | 7.293 |
| 77020819 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020820 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .066 |
| 77020821 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .069 |
| 77020822 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |
| 77020823 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |
| 77020824 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |
| 77020901 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |
| 77020902 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .069 |
| 77020903 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020904 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .066 |
| 77020905 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020906 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020907 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .069 |
| 77020908 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .066 |
| 77020909 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020910 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77020911 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .062 |
| 77020912 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .062 |
| 77020913 | .01 | .01 | 1.4 | 1.48 | .005 | .005 | .5 | .062 |
| 77020914 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77020915 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77020916 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77020917 | .01 | .01 | 1.4 | 1.46 | .025 | .015 | .5 | .066 |
| 77020918 | .01 | .01 | 1.5 | 1.50 | .010 | .005 | .5 | .062 |
| 77020919 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .062 |
| 77020920 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .066 |
| 77020921 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77020922 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .062 |
| 77020923 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .062 |
| 77020924 | .01 | .01 | 1.5 | 1.52 | .005 | .005 | .5 | .058 |
| 77021001 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .058 |
| 77021002 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .058 |
| 77021003 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .055 |
| 77021004 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .055 |
| 77021005 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .055 |
| 77021006 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .051 |
| 77021007 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .055 |
| 77021008 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .058 |
| 77021009 | .01 | .01 | 1.5 | 1.50 | .005 | .005 | .5 | .058 |
| 77021010 | .01 | .01 | 1.5 | 1.48 | .005 | .005 | .5 | .062 |
| 77021011 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .062 |
| 77021012 | .01 | .01 | 1.4 | 1.46 | .005 | .005 | .5 | .066 |
| 77021013 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | .5 | .069 |
| 77021014 | .01 | .01 | 10.0 | 1.44 | 9.990 | 9.990 | .5 | .058 |
| 77021015 | .01 | .01 | 10.0 | 1.44 | .005 | .005 | .5 | 7.293 |
| 77021016 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021017 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021018 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |
| 77021019 | .01 | .01 | 1.7 | 1.52 | .005 | .005 | .5 | .069 |
| 77021020 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .066 |
| 77021021 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .069 |
| 77021022 | .01 | .01 | 1.6 | 1.50 | .005 | .005 | .5 | .069 |
| 77021023 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .066 |
| 77021024 | .01 | .01 | 1.8 | 1.50 | .005 | .005 | .5 | .069 |
| 77021101 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .069 |
| 77021102 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .069 |
| 77021103 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .069 |
| 77021104 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .069 |
| 77021105 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .073 |
| 77021106 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .073 |
| 77021107 | .01 | .01 | 1.8 | 1.52 | .005 | .005 | .5 | .066 |
| 77021108 | .01 | .01 | 1.8 | 1.54 | .005 | .005 | .5 | .066 |
| 77021109 | .01 | .01 | 1.8 | 1.54 | .005 | .005 | .5 | .066 |
| 77021110 | .01 | .01 | 1.8 | 1.52 | .005 | .005 | .5 | .066 |
| 77021111 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021112 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021113 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021114 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021115 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021116 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021117 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77021118 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021119 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | .5 | .066 |
| 77021120 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .058 |
| 77021121 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .058 |
| 77021122 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .058 |
| 77021123 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .058 |
| 77021124 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .055 |
| 77021201 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .058 |
| 77021202 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .058 |
| 77021203 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .062 |
| 77021204 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | .5 | .062 |
| 77021205 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | .5 | .062 |
| 77021206 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021207 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021208 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | .5 | .066 |
| 77021209 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021210 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .069 |
| 77021211 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021212 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021213 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021214 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021215 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |
| 77021216 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .073 |
| 77021217 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .073 |
| 77021218 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021219 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .069 |
| 77021220 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021221 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |
| 77021222 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |
| 77021223 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021224 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021301 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021302 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .062 |
| 77021303 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .062 |
| 77021304 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .062 |
| 77021305 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .062 |
| 77021306 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021307 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .062 |
| 77021308 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021309 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .062 |
| 77021310 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021311 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021312 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021313 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021314 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021315 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .066 |
| 77021316 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .066 |
| 77021317 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .066 |
| 77021318 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .062 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77021319 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021320 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .058 |
| 77021321 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .058 |
| 77021322 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .058 |
| 77021323 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .055 |
| 77021324 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .058 |
| 77021401 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .058 |
| 77021402 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .055 |
| 77021403 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .051 |
| 77021404 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .047 |
| 77021405 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .055 |
| 77021406 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021407 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021408 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021409 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021410 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021411 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021412 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021413 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .066 |
| 77021414 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .069 |
| 77021415 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .069 |
| 77021416 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.5 | .066 |
| 77021417 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | 1.0 | .066 |
| 77021418 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021419 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021420 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021421 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021422 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021423 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021424 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .062 |
| 77021501 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021502 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021503 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |
| 77021504 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .069 |
| 77021505 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | .5 | .069 |
| 77021506 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .069 |
| 77021507 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | .5 | .069 |
| 77021508 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .069 |
| 77021509 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021510 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .062 |
| 77021511 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021512 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .069 |
| 77021513 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021514 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021515 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | 1.0 | .066 |
| 77021516 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021517 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .069 |
| 77021518 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021519 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77021520 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .069 |
| 77021521 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021522 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021523 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021524 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021601 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | .5 | .066 |
| 77021602 | .01 | .01 | 1.7 | 1.50 | .005 | .005 | .5 | .066 |
| 77021603 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021604 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .062 |
| 77021605 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .062 |
| 77021606 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .062 |
| 77021607 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021608 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .062 |
| 77021609 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.0 | .062 |
| 77021610 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | .5 | .066 |
| 77021611 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021612 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021613 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021614 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021615 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021616 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .062 |
| 77021617 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | .5 | .062 |
| 77021618 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | .5 | .062 |
| 77021619 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .062 |
| 77021620 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .062 |
| 77021621 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .066 |
| 77021622 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021623 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021624 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .062 |
| 77021701 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.5 | .062 |
| 77021702 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77021703 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77021704 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | .5 | .066 |
| 77021705 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | .5 | .062 |
| 77021706 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | .5 | .062 |
| 77021707 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .062 |
| 77021708 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | .5 | .062 |
| 77021709 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.5 | .058 |
| 77021710 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | .5 | .058 |
| 77021711 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | .5 | .062 |
| 77021712 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .062 |
| 77021713 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77021714 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77021715 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.0 | .066 |
| 77021716 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021717 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | .5 | .066 |
| 77021718 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.5 | .066 |
| 77021719 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |
| 77021720 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77021721 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | 1.0 | .066 |
| 77021722 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021723 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77021724 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77021801 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021802 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021803 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021804 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021805 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021806 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021807 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .066 |
| 77021808 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77021809 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | .5 | .066 |
| 77021810 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021811 | .01 | .01 | 1.6 | 1.48 | .005 | .005 | .5 | .066 |
| 77021812 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77021813 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | .5 | .069 |
| 77021814 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | .5 | .069 |
| 77021815 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | .5 | .069 |
| 77021816 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | .5 | .069 |
| 77021817 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | .5 | .069 |
| 77021818 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .066 |
| 77021819 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .066 |
| 77021820 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .066 |
| 77021821 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .066 |
| 77021822 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .062 |
| 77021823 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .062 |
| 77021824 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .062 |
| 77021901 | .01 | .01 | 1.7 | 1.40 | .005 | .005 | .5 | .062 |
| 77021902 | .01 | .01 | 1.7 | 1.40 | .005 | .005 | .5 | .066 |
| 77021903 | .01 | .01 | 1.7 | 1.40 | .005 | .005 | .5 | .062 |
| 77021904 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .062 |
| 77021905 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .062 |
| 77021906 | .01 | .01 | 1.7 | 1.40 | .005 | .005 | .5 | .062 |
| 77021907 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | .5 | .062 |
| 77021908 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | .5 | .062 |
| 77021909 | .01 | .01 | 1.7 | 1.40 | .005 | .005 | .5 | .062 |
| 77021910 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .066 |
| 77021911 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .066 |
| 77021912 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| [illegible] | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| [illegible] | [illegible] | [illegible] | 1.5 | 1.38 | .005 | .005 | .5 | .073 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .005 | .005 | .5 | .073 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .005 | .5 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .5 | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .5 | .066 |
| [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] | .5 | .066 |
| [illegible] | [illegible] | [illegible] | 1.5 | 1.40 | .005 | .005 | .5 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77021922 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77021923 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77021924 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022001 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77022002 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77022003 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77022004 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .069 |
| 77022005 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .073 |
| 77022006 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .073 |
| 77022007 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .073 |
| 77022008 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .073 |
| 77022009 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | 1.5 | .073 |
| 77022010 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .066 |
| 77022011 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77022012 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .073 |
| 77022013 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022014 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022015 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022016 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.0 | .069 |
| 77022017 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.0 | .069 |
| 77022018 | .01 | .01 | 1.5 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77022019 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022020 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022021 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022022 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022023 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022024 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022101 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022102 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022103 | .01 | .01 | 1.6 | 1.38 | .005 | .005 | .5 | .069 |
| 77022104 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022105 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022106 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022107 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022108 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022109 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .062 |
| 77022110 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022111 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.5 | .066 |
| 77022112 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.5 | .066 |
| 77022113 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022114 | .01 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022115 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .062 |
| 77022116 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .062 |
| 77022117 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .066 |
| 77022118 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .066 |
| 77022119 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .062 |
| 77022120 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .062 |
| 77022121 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .058 |
| 77022122 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .058 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO. | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77022123 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .058 |
| 77022124 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .058 |
| 77022201 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .055 |
| 77022202 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .051 |
| 77022203 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .055 |
| 77022204 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .058 |
| 77022205 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.0 | .066 |
| 77022206 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022207 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77022208 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .073 |
| 77022209 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022210 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022211 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022212 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77022213 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77022214 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77022215 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.0 | .069 |
| 77022216 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.0 | .069 |
| 77022217 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022218 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022219 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022220 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77022221 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022222 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .062 |
| 77022223 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .062 |
| 77022224 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022301 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77022302 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022303 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77022304 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022305 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77022306 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022307 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022308 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77022309 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022310 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022311 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.0 | .069 |
| 77022312 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | .5 | .069 |
| 77022313 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.0 | .069 |
| 77022314 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .073 |
| 77022315 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .073 |
| 77022316 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .073 |
| 77022317 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77022318 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77022319 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77022320 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022321 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022322 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022323 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77022324 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022401 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77022402 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022403 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022404 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022405 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022406 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022407 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .069 |
| 77022408 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77022409 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .069 |
| 77022410 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77022411 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77022412 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .073 |
| 77022413 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77022414 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77022415 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77022416 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .073 |
| 77022417 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .069 |
| 77022418 | 9.99 | 9.99 | 1.6 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022419 | 9.99 | 9.99 | 1.6 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022420 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022421 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022422 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022423 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77022424 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .062 |
| 77022501 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .058 |
| 77022502 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77022503 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 1.5 | .062 |
| 77022504 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77022505 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 1.5 | .062 |
| 77022506 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022507 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77022508 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .058 |
| 77022509 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 2.0 | .058 |
| 77022510 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .058 |
| 77022511 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .062 |
| 77022512 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 2.0 | .066 |
| 77022513 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022514 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022515 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022516 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022517 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022518 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77022519 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .069 |
| 77022520 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77022521 | 9.99 | .01 | 1.4 | 1.34 | .005 | .005 | .5 | .066 |
| 77022522 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .062 |
| 77022523 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022524 | 9.99 | .01 | 1.6 | 1.36 | .005 | .005 | .5 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77022601 | 9.99 | .01 | 1.5 | 1.36 | .005 | .005 | .5 | .066 |
| 77022602 | 9.99 | .01 | 1.5 | 1.36 | .005 | .005 | .5 | .066 |
| 77022603 | 9.99 | .01 | 1.5 | 1.36 | .005 | .005 | .5 | .066 |
| 77022604 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022605 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022606 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .066 |
| 77022607 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .069 |
| 77022608 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | .5 | .069 |
| 77022609 | 9.99 | .01 | 1.5 | 1.36 | .005 | .005 | 1.0 | .069 |
| 77022610 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022611 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022612 | 9.99 | .01 | 1.4 | 1.36 | .005 | .005 | 2.0 | .069 |
| 77022613 | 9.99 | .01 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022614 | 9.99 | .01 | 1.4 | 1.34 | .005 | .005 | 2.0 | .066 |
| 77022615 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77022616 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022617 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77022618 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | .5 | .069 |
| 77022619 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | .5 | .080 |
| 77022620 | 9.99 | 9.99 | 1.3 | 1.32 | .005 | .005 | .5 | .077 |
| 77022621 | 9.99 | 9.99 | 1.3 | 1.32 | .005 | .005 | .5 | .077 |
| 77022622 | 9.99 | 9.99 | 1.3 | 1.32 | .005 | .005 | .5 | .077 |
| 77022623 | 9.99 | 9.99 | 1.3 | 1.32 | .005 | .005 | .5 | .077 |
| 77022624 | 9.99 | 9.99 | 1.3 | 1.32 | .005 | .005 | .5 | .073 |
| 772 26 | 0.00 | 0.00 | 0.0 | 0.00 | 0.000 | 0.000 | 0.0 | 0.000 |
| 77022701 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | .5 | .073 |
| 77022702 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | .5 | .073 |
| 77022703 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | .5 | .073 |
| 77022704 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | .5 | .073 |
| 77022705 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | .5 | .069 |
| 77022706 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022707 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | .5 | .069 |
| 77022708 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | .5 | .073 |
| 77022709 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .073 |
| 77022710 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | .5 | .073 |
| 77022711 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .073 |
| 77022712 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .073 |
| 77022713 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .073 |
| 77022714 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .077 |
| 77022715 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .077 |
| 77022716 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | .5 | .077 |
| 77022717 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | .5 | .080 |
| 77022718 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | .5 | .077 |
| 77022719 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .077 |
| 77022720 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .077 |
| 77022721 | 9.99 | 9.99 | 1.5 | 1.44 | .005 | .005 | .5 | .073 |
| 77022722 | 9.99 | 9.99 | 1.5 | 1.42 | .005 | .005 | .5 | .073 |
| 77022723 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .073 |
| 77022724 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .073 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77022801 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .073 |
| 77022802 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .077 |
| 77022803 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .077 |
| 77022804 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .073 |
| 77022805 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .073 |
| 77022806 | 9.99 | 9.99 | 1.6 | 1.40 | .005 | .005 | .5 | .073 |
| 77022807 | 9.99 | 9.99 | 1.6 | 1.40 | .005 | .005 | .5 | .069 |
| 77022808 | 9.99 | 9.99 | 1.6 | 1.40 | .005 | .005 | .5 | .056 |
| 77022809 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .066 |
| 77022810 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77022811 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .069 |
| 77022812 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.0 | .073 |
| 77022813 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | .5 | .073 |
| 77022814 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.0 | .073 |
| 77022815 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.0 | .073 |
| 77022816 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.0 | .073 |
| 77022817 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .073 |
| 77022818 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77022819 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | 2.0 | .069 |
| 77022820 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 2.0 | .069 |
| 77022821 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.0 | .069 |
| 77022822 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.0 | .066 |
| 77022823 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 2.0 | .066 |
| 77022824 | 9.99 | 9.99 | 1.6 | 1.38 | .005 | .005 | 1.5 | .066 |
| 77030101 | 9.99 | 9.99 | 1.6 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77030102 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 2.0 | .066 |
| 77030103 | 9.99 | 9.99 | 1.6 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77030104 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .066 |
| 77030105 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .062 |
| 77030106 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .062 |
| 77030107 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .066 |
| 77030108 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .062 |
| 77030109 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77030110 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77030111 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030112 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .073 |
| 77030113 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030114 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030115 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .077 |
| 77030116 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .077 |
| 77030117 | 9.99 | 9.99 | 1.6 | 1.36 | .005 | .005 | 1.0 | .077 |
| 77030118 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .077 |
| 77030119 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .077 |
| 77030120 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .069 |
| 77030121 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .069 |
| 77030122 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .069 |
| 77030123 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .069 |
| 77030124 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .069 |
| 77030201 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77030202 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77030203 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77030204 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77030205 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77030206 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .066 |
| 77030207 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77030208 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 1.5 | .062 |
| 77030209 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.5 | .066 |
| 77030210 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.5 | .066 |
| 77030211 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .069 |
| 77030212 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77030213 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .069 |
| 77030214 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030215 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030216 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030217 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030218 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.5 | .073 |
| 77030219 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .066 |
| 77030220 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 2.0 | .062 |
| 77030221 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 2.0 | .062 |
| 77030222 | 9.99 | 9.99 | 1.5 | 1.36 | .005 | .005 | 2.0 | .058 |
| 77030223 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .058 |
| 77030224 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 2.0 | .062 |
| 77030301 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .062 |
| 77030302 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .058 |
| 77030303 | 9.99 | 9.99 | 1.5 | 1.34 | .005 | .005 | 1.5 | .058 |
| 77030304 | 9.99 | 9.99 | 1.5 | 1.32 | .005 | .005 | 2.0 | .058 |
| 77030305 | 9.99 | 9.99 | 1.6 | 1.32 | .005 | .005 | 1.5 | .058 |
| 77030306 | 9.99 | 9.99 | 1.7 | 1.32 | .005 | .005 | 1.5 | .058 |
| 77030307 | 9.99 | 9.99 | 1.6 | 1.32 | .005 | .005 | 2.0 | .055 |
| 77030308 | 9.99 | 9.99 | 1.7 | 1.32 | .005 | .005 | 2.0 | .058 |
| 77030309 | 9.99 | 9.99 | 1.6 | 1.32 | .005 | .005 | 1.5 | .058 |
| 77030310 | 9.99 | 9.99 | 1.6 | 1.32 | .005 | .005 | 1.0 | .058 |
| 77030311 | 9.99 | 9.99 | 1.5 | 1.32 | .005 | .005 | 1.5 | .062 |
| 77030312 | 9.99 | 9.99 | 1.5 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030313 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.5 | .066 |
| 77030314 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.5 | .069 |
| 77030315 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.5 | .069 |
| 77030316 | 9.99 | 9.99 | 1.5 | 1.30 | .005 | .005 | 1.5 | .069 |
| 77030317 | 9.99 | 9.99 | 1.5 | 1.30 | .005 | .005 | 2.0 | .069 |
| 77030318 | 9.99 | 9.99 | 1.5 | 1.30 | .005 | .005 | 1.5 | .066 |
| 77030319 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.0 | .069 |
| 77030320 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.5 | .069 |
| 77030321 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.5 | .069 |
| 77030322 | 9.99 | 9.99 | 1.4 | 1.28 | .005 | .005 | 2.0 | .069 |
| 77030323 | 9.99 | 9.99 | 1.3 | 1.28 | .005 | .005 | 2.0 | .069 |
| 77030324 | 9.99 | 9.99 | 1.3 | 1.26 | .005 | .005 | 2.0 | .066 |
| 77030401 | 9.99 | 9.99 | 1.3 | 1.26 | .005 | .005 | 1.0 | .069 |
| 77030402 | 9.99 | 9.99 | 1.3 | 1.24 | .005 | .005 | 1.0 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77030403 | 9.99 | 9.99 | 1.3 | 1.24 | .005 | .005 | 1.5 | .066 |
| 77030404 | 9.99 | 9.99 | 1.4 | 1.24 | .005 | .005 | 1.5 | .066 |
| 77030405 | 9.99 | 9.99 | 1.5 | 1.26 | .005 | .005 | 1.0 | .066 |
| 77030406 | 9.99 | 9.99 | 1.5 | 1.24 | .005 | .005 | 1.5 | .066 |
| 77030407 | 9.99 | 9.99 | 1.4 | 1.26 | .005 | .005 | 1.0 | .062 |
| 77030408 | 9.99 | 9.99 | 1.5 | 1.26 | .005 | .005 | 1.0 | .062 |
| 77030409 | 9.99 | 9.99 | 1.4 | 1.28 | .005 | .005 | 1.5 | .062 |
| 77030410 | 9.99 | 9.99 | 1.4 | 1.30 | .005 | .005 | 1.5 | .062 |
| 77030411 | 9.99 | 9.99 | 1.3 | 1.30 | .005 | .005 | 1.5 | .066 |
| 77030412 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 2.0 | .066 |
| 77030413 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 2.0 | .066 |
| 77030414 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030415 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 2.0 | .069 |
| 77030416 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030417 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030418 | 9.99 | 9.99 | 1.4 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030419 | 9.99 | 9.99 | 1.4 | 1.34 | .005 | .005 | 1.0 | .062 |
| 77030420 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77030421 | 9.99 | 9.99 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77030422 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.0 | .066 |
| 77030423 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | 1.0 | .069 |
| 77030424 | 9.99 | 9.99 | 1.4 | 1.38 | .005 | .005 | 1.0 | .069 |
| 77030501 | 9.99 | 9.99 | 1.4 | 1.40 | .005 | .005 | 1.0 | .069 |
| 77030502 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | 1.0 | .069 |
| 77030503 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | 1.0 | .069 |
| 77030504 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77030505 | 9.99 | 9.99 | 10.0 | 1.40 | .005 | .005 | .5 | .069 |
| 77030506 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | .5 | .069 |
| 77030507 | 9.99 | 9.99 | 10.0 | 1.36 | .005 | .005 | .5 | .069 |
| 77030508 | 9.99 | 9.99 | 10.0 | 1.02 | .005 | .005 | 1.0 | .069 |
| 77030509 | 9.99 | 9.99 | 10.0 | .88 | .005 | .005 | 1.5 | .069 |
| 77030510 | 9.99 | 9.99 | 10.0 | .50 | .005 | .005 | 1.5 | .073 |
| 77030511 | 9.99 | 9.99 | 10.0 | .04 | .005 | .005 | .5 | .073 |
| 77030512 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 1.5 | .073 |
| 77030513 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 1.5 | .073 |
| 77030514 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 2.0 | .073 |
| 77030515 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 2.0 | .073 |
| 77030516 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 1.5 | .077 |
| 77030517 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 1.5 | .073 |
| 77030518 | 9.99 | 9.99 | 10.0 | .02 | .005 | .005 | 2.0 | .073 |
| 77030519 | 9.99 | 9.99 | 10.0 | .10 | .005 | .005 | 1.0 | .073 |
| 77030520 | 9.99 | 9.99 | 10.0 | .80 | .005 | .005 | 1.0 | .069 |
| 77030521 | 9.99 | 9.99 | 10.0 | 1.30 | .005 | .005 | 1.0 | .073 |
| 77030522 | 9.99 | 9.99 | 10.0 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77030523 | 9.99 | 9.99 | 1.6 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77030524 | 9.99 | 9.99 | 1.6 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77030601 | 9.99 | 9.99 | 1.6 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77030602 | 9.99 | 9.99 | 1.5 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77030603 | 9.99 | 9.99 | 1.6 | 1.40 | .005 | .005 | 1.0 | .073 |

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77030604 | 9.99 | 9.99 | 1.5 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77030605 | 9.99 | 9.99 | 1.3 | 1.40 | .005 | .005 | 1.0 | .073 |
| 77030606 | 9.99 | 9.99 | 1.4 | 1.40 | .005 | .005 | 1.0 | .073 |
| 77030607 | 9.99 | 9.99 | 1.4 | 1.40 | .005 | .005 | 1.0 | .073 |
| 77030608 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | 1.0 | .069 |
| 77030609 | 9.99 | 9.99 | 10.0 | 1.40 | .005 | .005 | 1.5 | .073 |
| 77030610 | 9.99 | 9.99 | 10.0 | 1.40 | .005 | .005 | 1.0 | .069 |
| 77030611 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 1.0 | .077 |
| 77030612 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 1.0 | .077 |
| 77030613 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 2.0 | .077 |
| 77030614 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 1.5 | .077 |
| 77030615 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 2.0 | .073 |
| 77030616 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 1.5 | .073 |
| 77030617 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | 1.0 | .073 |
| 77030618 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | .5 | .069 |
| 77030619 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77030620 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77030621 | 9.99 | 9.99 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77030622 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77030623 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77030624 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77030701 | 9.99 | 9.99 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77030702 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | .5 | .069 |
| 77030703 | 9.99 | 9.99 | 10.0 | 1.38 | .005 | .005 | .5 | .069 |
| 77030704 | 9.99 | 9.99 | 10.0 | 1.32 | .005 | .005 | .5 | .069 |
| 77030705 | 9.99 | 9.99 | 10.0 | 1.24 | .005 | .005 | 1.0 | .066 |
| 77030706 | 9.99 | 9.99 | 10.0 | .94 | .005 | .005 | 1.0 | .066 |
| 77030707 | 9.99 | 9.99 | 10.0 | .34 | .005 | .005 | .5 | .066 |
| 77030708 | 9.99 | 9.99 | 10.0 | .54 | .005 | .005 | .5 | .069 |
| 77030709 | 9.99 | 9.99 | 10.0 | .50 | .005 | .005 | .5 | .069 |
| 77030710 | 9.99 | 9.99 | 10.0 | .18 | .005 | .005 | .5 | .069 |
| 77030711 | .01 | .01 | 10.0 | .06 | .005 | .005 | .5 | .069 |
| 77030712 | .01 | .01 | 10.0 | .08 | .005 | .005 | 1.0 | .073 |
| 77030713 | .01 | .01 | 10.0 | .08 | .005 | .005 | .5 | .069 |
| 77030714 | .01 | .01 | 10.0 | .10 | .005 | .005 | 1.0 | .073 |
| 77030715 | .01 | .01 | 10.0 | .08 | .005 | .005 | 1.0 | .073 |
| 77030716 | .01 | .01 | 10.0 | .14 | .005 | .005 | 1.0 | .073 |
| 77030717 | .01 | .01 | 10.0 | .18 | .005 | .005 | 1.0 | .073 |
| 77030718 | .01 | .01 | 10.0 | .12 | .005 | .005 | 1.0 | .069 |
| 77030719 | .01 | .01 | 10.0 | .24 | .005 | .005 | 1.0 | .069 |
| 77030720 | .01 | .01 | 10.0 | .40 | .005 | .005 | 1.0 | .066 |
| 77030721 | .01 | .01 | 10.0 | 1.10 | .005 | .005 | 1.0 | .066 |
| 77030722 | .01 | .01 | 10.0 | 1.32 | .005 | .005 | 1.0 | .066 |
| 77030723 | .01 | .01 | 10.0 | 1.32 | .005 | .005 | 1.0 | .066 |
| 77030724 | .01 | .01 | 10.0 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77030801 | .01 | .01 | 10.0 | 1.36 | .005 | .005 | .5 | .066 |
| 77030802 | .01 | .01 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77030803 | .01 | .01 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77030804 | .01 | .01 | 1.4 | 1.36 | .005 | .005 | 1.0 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77030805 | .01 | .01 | 1.5 | 1.36 | .005 | .005 | 1.0 | .066 |
| 77030806 | .01 | .01 | 1.5 | 1.36 | .005 | .005 | 1.0 | .062 |
| 77030807 | .01 | .01 | 1.5 | 1.36 | .005 | .005 | .5 | .062 |
| 77030808 | .01 | .01 | 1.5 | 1.36 | .005 | .005 | 1.0 | .062 |
| 77030809 | .01 | .01 | 1.4 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77030810 | .01 | .01 | 1.4 | 1.34 | .005 | .005 | 1.5 | .062 |
| 77030811 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030812 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 1.5 | .066 |
| 77030813 | .01 | .01 | 1.3 | 1.30 | .005 | .005 | 1.0 | .069 |
| 77030814 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 1.0 | .069 |
| 77030815 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 1.0 | .069 |
| 77030816 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 1.0 | .069 |
| 77030817 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030818 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .066 |
| 77030819 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | .5 | .066 |
| 77030820 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77030821 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | .5 | .069 |
| 77030822 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77030823 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .069 |
| 77030824 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .069 |
| 77030901 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .066 |
| 77030902 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.0 | .066 |
| 77030903 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .066 |
| 77030904 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .066 |
| 77030905 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.0 | .066 |
| 77030906 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.0 | .062 |
| 77030907 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | .5 | .058 |
| 77030908 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | .5 | .058 |
| 77030909 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .058 |
| 77030910 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .062 |
| 77030911 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .062 |
| 77030912 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.0 | .062 |
| 77030913 | .01 | .01 | 1.4 | 1.36 | .005 | .005 | 1.0 | .062 |
| 77030914 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030915 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030916 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030917 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030918 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030919 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030920 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030921 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030922 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030923 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77030924 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031001 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031002 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031003 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031004 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031005 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77031006 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031007 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031008 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031009 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031010 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77031011 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 2.0 | .069 |
| 77031012 | .01 | .01 | 1.4 | 1.38 | .005 | .005 | 1.5 | .069 |
| 77031013 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | 1.5 | .069 |
| 77031014 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | 2.0 | .069 |
| 77031015 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | 2.0 | .073 |
| 77031016 | .01 | .01 | 1.4 | 1.40 | .005 | .005 | 2.0 | .073 |
| 77031017 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 2.5 | .073 |
| 77031018 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.5 | .073 |
| 77031019 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77031020 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.5 | .069 |
| 77031021 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.5 | .069 |
| 77031022 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.5 | .069 |
| 77031023 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77031024 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.5 | .069 |
| 77031101 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031102 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031103 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031104 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031105 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031106 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77031107 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77031108 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77031109 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77031110 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.5 | .066 |
| 77031111 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.5 | .069 |
| 77031112 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.5 | .069 |
| 77031113 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77031114 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77031115 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031116 | .01 | .01 | 1.4 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77031117 | .01 | .01 | 1.4 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77031118 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77031119 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77031120 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031121 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031122 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031123 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77031124 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | 1.0 | .073 |
| 77031201 | .01 | .01 | 1.5 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77031202 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77031203 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77031204 | .01 | .01 | 1.5 | 1.46 | .005 | .005 | 1.0 | .073 |
| 77031205 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77031206 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .073 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77031207 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77031208 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.5 | .073 |
| 77031209 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 2.0 | .073 |
| 77031210 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 2.0 | .073 |
| 77031211 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.5 | .077 |
| 77031212 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .080 |
| 77031213 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .088 |
| 77031214 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .084 |
| 77031215 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.0 | .080 |
| 77031216 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .080 |
| 77031217 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .077 |
| 77031218 | .01 | .01 | 1.5 | 1.42 | .005 | .005 | 1.0 | .073 |
| 77031219 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.0 | .077 |
| 77031220 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | 1.0 | .080 |
| 77031221 | .01 | .01 | 1.5 | 1.40 | .005 | .005 | 1.5 | .080 |
| 77031222 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.5 | .077 |
| 77031223 | .01 | .01 | 1.5 | 1.38 | .005 | .005 | 1.5 | .077 |
| 77031224 | .01 | .01 | 1.4 | 1.34 | .005 | .005 | 1.5 | .077 |
| 77031301 | .01 | .01 | 1.2 | 1.34 | .005 | .005 | 2.0 | .077 |
| 77031302 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 1.5 | .077 |
| 77031303 | .01 | .01 | 1.1 | 1.32 | .005 | .005 | 1.0 | .077 |
| 77031304 | .01 | .01 | 1.0 | 1.30 | .005 | .005 | 1.0 | .077 |
| 77031305 | .01 | .01 | .6 | 1.30 | .005 | .005 | 1.5 | .077 |
| 77031306 | .01 | .01 | 10.0 | 1.22 | .005 | .005 | 1.5 | .077 |
| 77031307 | .01 | .01 | 10.0 | .98 | .005 | .005 | 1.5 | .077 |
| 77031308 | .01 | .01 | 10.0 | .44 | .005 | .005 | 1.0 | .077 |
| 77031309 | .01 | .01 | 10.0 | .10 | .005 | .005 | 1.5 | .077 |
| 77031310 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031311 | .01 | .01 | 10.0 | .52 | .005 | .005 | 1.0 | .084 |
| 77031312 | .01 | .01 | 10.0 | 1.28 | .005 | .005 | 1.0 | .084 |
| 77031313 | .01 | .01 | 10.0 | 1.30 | .005 | .005 | 1.0 | .088 |
| 77031314 | .01 | .01 | 1.2 | 1.32 | .005 | .005 | 1.0 | .091 |
| 77031315 | .01 | .01 | 1.3 | 1.30 | .005 | .005 | 1.0 | .091 |
| 77031316 | .01 | .01 | 1.3 | 1.28 | .005 | .005 | 1.5 | .095 |
| 77031317 | .01 | .01 | 1.3 | 1.28 | .005 | .005 | 1.0 | .099 |
| 77031318 | .01 | .01 | 1.3 | 1.30 | .005 | .005 | .5 | .099 |
| 77031319 | .01 | .01 | 1.3 | 1.30 | .005 | .005 | .5 | .095 |
| 77031320 | .01 | .01 | 1.4 | 1.32 | .005 | .005 | 1.0 | .095 |
| 77031321 | .01 | .01 | 1.3 | 1.34 | .005 | .005 | 1.0 | .091 |
| 77031322 | .01 | .01 | 1.3 | 1.34 | .005 | .005 | 1.5 | .088 |
| 77031323 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 2.0 | .084 |
| 77031324 | .01 | .01 | 1.3 | 1.32 | .005 | .005 | 2.0 | .084 |
| 77031401 | .01 | .01 | 1.2 | 1.32 | .005 | .005 | 2.0 | .084 |
| 77031402 | .01 | .01 | 10.0 | 1.26 | .005 | .005 | 2.5 | .080 |
| 77031403 | .01 | .01 | 10.0 | 1.10 | .005 | .005 | 2.0 | .077 |
| 77031404 | .01 | .01 | 10.0 | .64 | .005 | .005 | 2.0 | .077 |
| 77031405 | .01 | .01 | 10.0 | .60 | .005 | .005 | 2.0 | .077 |
| 77031406 | .01 | .01 | 10.0 | .26 | .005 | .005 | 2.0 | .073 |
| 77031407 | .01 | .01 | 10.0 | .44 | .005 | .005 | 2.0 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77031408 | .01 | .01 | 10.0 | .40 | .005 | .005 | 1.5 | .069 |
| 77031409 | .01 | .01 | 10.0 | .16 | .005 | .005 | 1.5 | .073 |
| 77031410 | .01 | .01 | 10.0 | .30 | .005 | .005 | 2.0 | .073 |
| 77031411 | .01 | .01 | 10.0 | .44 | .005 | .005 | 2.0 | .077 |
| 77031412 | .01 | .01 | 10.0 | .30 | .005 | .005 | 2.0 | .080 |
| 77031413 | .01 | .01 | 10.0 | .12 | .005 | .005 | 1.5 | .080 |
| 77031414 | .01 | .01 | 10.0 | .08 | .005 | .005 | 1.0 | .084 |
| 77031415 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031416 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031417 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031418 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031419 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031420 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031421 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031422 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031423 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031424 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031501 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031502 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031503 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031504 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031505 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031506 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031507 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031508 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .073 |
| 77031509 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .077 |
| 77031510 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031511 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031512 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031513 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031514 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031515 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .091 |
| 77031516 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .091 |
| 77031517 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .095 |
| 77031518 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031519 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031520 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031521 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031522 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031523 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031524 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031601 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031602 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031603 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031604 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031605 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031606 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031607 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031608 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77031609 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031610 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031611 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .033 |
| 77031612 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .033 |
| 77031613 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .088 |
| 77031614 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031615 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .088 |
| 77031616 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031617 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031618 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031619 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .088 |
| 77031620 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031621 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031622 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |
| 77031623 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .084 |
| 77031624 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .084 |
| 77031701 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .060 |
| 77031702 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .077 |
| 77031703 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031704 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031705 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031706 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031707 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031708 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .073 |
| 77031709 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .077 |
| 77031710 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .077 |
| 77031711 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031712 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031713 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .084 |
| 77031714 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .084 |
| 77031715 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031716 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031717 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |
| 77031718 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031719 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .084 |
| 77031720 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .084 |
| 77031721 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031722 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031723 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .080 |
| 77031724 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .077 |
| 77031801 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .077 |
| 77031802 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .077 |
| 77031803 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .077 |
| 77031804 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031805 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .088 |
| 77031806 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .088 |
| 77031807 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .084 |
| 77031808 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.5 | .088 |
| 77031809 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .084 |

RIO BLANCO OIL SHALÉ PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77031810 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031811 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .077 |
| 77031812 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .077 |
| 77031813 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .077 |
| 77031814 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .080 |
| 77031815 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |
| 77031816 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |
| 77031817 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .080 |
| 77031818 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | 7.293 |
| 77031819 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |
| 77031820 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .080 |
| 77031821 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031822 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031823 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031824 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031901 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031902 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031903 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031904 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031905 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031906 | .01 | .01 | 10.0 | .02 | .005 | .005 | .5 | .073 |
| 77031907 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .073 |
| 77031908 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.5 | .073 |
| 77031909 | .01 | .01 | 10.0 | .02 | .005 | .005 | 2.0 | .077 |
| 77031910 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031911 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031912 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031913 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031914 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031915 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031916 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | .077 |
| 77031917 | .01 | .01 | 10.0 | .02 | .005 | .005 | 1.0 | 7.293 |
| 77031918 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .073 |
| 77031919 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .073 |
| 77031920 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77031921 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77031922 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77031923 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .073 |
| 77031924 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .073 |
| 77032001 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77032002 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77032003 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77032004 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77032005 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77032006 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .069 |
| 77032007 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .066 |
| 77032008 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032009 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032010 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77032011 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032012 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032013 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032014 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032015 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032016 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032017 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032018 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032019 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032020 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032021 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032022 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032023 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032024 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032101 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032102 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032103 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032104 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032105 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032106 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032107 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032108 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032109 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032110 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032111 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032112 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032113 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032114 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032115 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032116 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032117 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032118 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032119 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .073 |
| 77032120 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032121 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032122 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032123 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032124 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032201 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032202 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032203 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032204 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032205 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032206 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032207 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032208 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77032209 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77032210 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032211 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77032212 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032213 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032214 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032215 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032216 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032217 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032218 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032219 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032220 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032221 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032222 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032223 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032224 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032301 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032302 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032303 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032304 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032305 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032306 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032307 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032308 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .077 |
| 77032309 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .069 |
| 77032310 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032311 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032312 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .080 |
| 77032313 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032314 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032315 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032316 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032317 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032318 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032319 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032320 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032321 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032322 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032323 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032324 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032401 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032402 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032403 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032404 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .080 |
| 77032405 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032406 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .091 |
| 77032407 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .095 |
| 77032408 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032409 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .091 |
| 77032410 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .095 |
| 77032411 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .099 |
| 77032412 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .102 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77032413 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .099 |
| 77032414 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .095 |
| 77032415 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .091 |
| 77032416 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .091 |
| 77032417 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032418 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .088 |
| 77032419 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032420 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032421 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032422 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032423 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032424 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032501 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032502 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .084 |
| 77032503 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032504 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .088 |
| 77032505 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032506 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .084 |
| 77032507 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032508 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032509 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032510 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .077 |
| 77032511 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .080 |
| 77032512 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032513 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032514 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .084 |
| 77032515 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .084 |
| 77032516 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .084 |
| 77032517 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032518 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032519 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032520 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032521 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032522 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .077 |
| 77032523 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032524 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032601 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032602 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032603 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032604 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .066 |
| 77032605 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032606 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032607 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032608 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032609 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032610 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032611 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .077 |
| 77032612 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032613 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77032614 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032615 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032616 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032617 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032618 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032619 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032620 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032621 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032622 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .077 |
| 77032623 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032624 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032701 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032702 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .084 |
| 77032703 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032704 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032705 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032706 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032707 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032708 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032709 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032710 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032711 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032712 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032713 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032714 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .084 |
| 77032715 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032716 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032717 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032718 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032719 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .073 |
| 77032720 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032721 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032722 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032723 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032724 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032801 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032802 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .091 |
| 77032803 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .088 |
| 77032804 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032805 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032806 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032807 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032808 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032809 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032810 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032811 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032812 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032813 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032814 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77032815 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032816 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032817 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032818 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032819 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032820 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .073 |
| 77032821 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .073 |
| 77032822 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032823 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032824 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .073 |
| 77032901 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .069 |
| 77032902 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032903 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .069 |
| 77032904 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .069 |
| 77032905 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .069 |
| 77032906 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | .069 |
| 77032907 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032908 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .066 |
| 77032909 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77032910 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .066 |
| 77032911 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .069 |
| 77032912 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.5 | 7.293 |
| 77032913 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .073 |
| 77032914 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032915 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032916 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .080 |
| 77032917 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032918 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77032919 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .077 |
| 77032920 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032921 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .077 |
| 77032922 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77032923 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .069 |
| 77032924 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77033001 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .069 |
| 77033002 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033003 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033004 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033005 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033006 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033007 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033008 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .066 |
| 77033009 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 2.0 | .066 |
| 77033010 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .066 |
| 77033011 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .069 |
| 77033012 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77033013 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.0 | .073 |
| 77033014 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .077 |
| 77033015 | .01 | .01 | 1.4 | 1.10 | .005 | .005 | 1.0 | .077 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77033016 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .077 |
| 77033017 | .01 | .01 | 1.6 | 1.32 | .005 | .005 | 1.0 | .077 |
| 77033018 | .01 | .01 | 1.3 | .90 | .005 | .005 | 1.0 | .080 |
| 77033019 | .01 | .01 | .3 | .10 | .005 | .005 | .5 | .077 |
| 77033020 | .01 | .01 | .2 | .10 | .005 | .005 | 1.0 | .077 |
| 77033021 | .01 | .01 | 1.4 | .70 | .005 | .005 | 1.0 | .077 |
| 77033022 | .01 | .01 | 2.0 | 1.12 | .005 | .005 | 1.5 | .077 |
| 77033023 | .01 | .01 | 2.2 | 1.30 | .005 | .005 | 1.0 | .073 |
| 77033024 | .01 | .01 | 2.1 | 1.40 | .005 | .005 | 1.5 | .077 |
| 77033101 | .01 | .01 | 1.8 | 1.26 | .005 | .005 | 1.5 | .077 |
| 77033102 | .01 | .01 | 1.6 | .90 | .005 | .005 | 1.0 | .077 |
| 77033103 | .01 | .01 | 1.8 | .94 | .005 | .005 | 1.0 | .077 |
| 77033104 | .01 | .01 | 1.6 | 1.00 | .005 | .005 | 1.0 | .073 |
| 77033105 | .01 | .01 | 1.5 | .94 | .005 | .005 | 1.5 | .073 |
| 77033106 | .01 | .01 | 1.7 | 1.16 | .005 | .005 | 1.5 | .073 |
| 77033107 | .01 | .01 | 1.8 | 1.36 | .005 | .005 | 1.5 | .073 |
| 77033108 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 1.5 | .073 |
| 77033109 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | 1.5 | .080 |
| 77033110 | .01 | .01 | 1.8 | 1.52 | .005 | .005 | 1.0 | .084 |
| 77033111 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | 1.0 | .088 |
| 77033112 | .01 | .01 | 1.7 | 1.48 | .005 | .005 | 1.5 | .088 |
| 77033113 | .01 | .01 | 1.6 | 1.46 | .005 | .005 | 1.0 | .091 |
| 77033114 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.0 | .088 |
| 77033115 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.0 | .088 |
| 77033116 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.0 | .088 |
| 77033117 | .01 | .01 | 1.6 | 1.44 | .005 | .005 | 1.0 | .088 |
| 77033118 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .084 |
| 77033119 | .01 | .01 | 1.1 | .80 | .005 | .005 | 1.0 | .080 |
| 77033120 | .01 | .01 | 1.2 | .92 | .005 | .005 | 1.0 | .077 |
| 77033121 | .01 | .01 | 1.7 | 1.30 | .005 | .005 | 1.5 | .080 |
| 77033122 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .084 |
| 77033123 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .084 |
| 77033124 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .084 |
| 77040101 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .080 |
| 77040102 | .01 | .01 | 2.0 | 1.46 | .005 | .005 | 1.5 | .077 |
| 77040103 | .01 | .01 | 2.2 | 1.44 | .005 | .005 | 1.5 | .077 |
| 77040104 | .01 | .01 | 2.0 | 1.44 | .005 | .005 | 1.0 | .080 |
| 77040105 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .084 |
| 77040106 | .01 | .01 | 1.7 | 1.38 | .005 | .005 | 1.0 | .080 |
| 77040107 | .01 | .01 | 1.7 | 1.40 | .005 | .005 | 1.0 | .077 |
| 77040108 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.0 | .077 |
| 77040109 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .077 |
| 77040110 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.0 | .068 |
| 77040111 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | 1.5 | .084 |
| 77040112 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | 1.5 | .088 |
| 77040113 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .084 |
| 77040114 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.5 | .088 |
| 77040115 | .01 | .01 | 10.0 | 1.42 | .005 | .005 | 1.5 | .088 |
| 77040116 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .088 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77040117 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .088 |
| 77040118 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.5 | .091 |
| 77040119 | .01 | .01 | 1.6 | 1.18 | .005 | .005 | 1.5 | .088 |
| 77040120 | .01 | .01 | 1.0 | .66 | .005 | .005 | 1.5 | .084 |
| 77040121 | .01 | .01 | 1.7 | 1.12 | .005 | .005 | 2.0 | .084 |
| 77040122 | .01 | .01 | 2.2 | 1.40 | .005 | .005 | 1.5 | .073 |
| 77040123 | .01 | .01 | 2.1 | 1.42 | .005 | .005 | 1.5 | .073 |
| 77040124 | .01 | .01 | 2.0 | 1.42 | .005 | .005 | 1.5 | .077 |
| 77040201 | .01 | .01 | 2.0 | 1.42 | .005 | .005 | 1.5 | .073 |
| 77040202 | .01 | .01 | 2.1 | 1.44 | .005 | .005 | 1.5 | .073 |
| 77040203 | .01 | .01 | 2.2 | 1.44 | .005 | .005 | 2.0 | .069 |
| 77040204 | .01 | .01 | 2.0 | 1.44 | .005 | .005 | 2.0 | .073 |
| 77040205 | .01 | .01 | 1.9 | 1.42 | .005 | .005 | 2.0 | .073 |
| 77040206 | .01 | .01 | 2.0 | 1.42 | .005 | .005 | 2.0 | .069 |
| 77040207 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 2.0 | .066 |
| 77040208 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 2.5 | .066 |
| 77040209 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 2.5 | .066 |
| 77040210 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 2.0 | .069 |
| 77040211 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .069 |
| 77040212 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 1.5 | .073 |
| 77040213 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .073 |
| 77040214 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | 1.5 | .077 |
| 77040215 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | 2.0 | .077 |
| 77040216 | .01 | .01 | 1.9 | 1.48 | .005 | .005 | 1.5 | .077 |
| 77040217 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 2.0 | .084 |
| 77040218 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 2.0 | .084 |
| 77040219 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.5 | .088 |
| 77040220 | .01 | .01 | 1.8 | 1.40 | .005 | .005 | 1.5 | .084 |
| 77040221 | .01 | .01 | 1.8 | 1.20 | .005 | .005 | 1.5 | .084 |
| 77040222 | .01 | .01 | 1.5 | .90 | .005 | .005 | 1.5 | .084 |
| 77040223 | .01 | .01 | 1.7 | 1.06 | .005 | .005 | 1.5 | .084 |
| 77040224 | .01 | .01 | 1.5 | .86 | .005 | .005 | 1.5 | .080 |
| 77040301 | .01 | .01 | 1.3 | .76 | .005 | .005 | 1.5 | .080 |
| 77040302 | .01 | .01 | 1.5 | .90 | .005 | .005 | 2.0 | .077 |
| 77040303 | .01 | .01 | 1.4 | .88 | .005 | .005 | 2.0 | .077 |
| 77040304 | .01 | .01 | 1.5 | .94 | .005 | .005 | 1.5 | .077 |
| 77040305 | .01 | .01 | 1.7 | 1.12 | .005 | .005 | 1.5 | .073 |
| 77040306 | .01 | .01 | 1.5 | .96 | .005 | .005 | 1.5 | .073 |
| 77040307 | .01 | .01 | 1.8 | 1.20 | .005 | .005 | 1.5 | .073 |
| 77040308 | .01 | .01 | 1.8 | 1.40 | .005 | .005 | 1.5 | .073 |
| 77040309 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | 2.0 | .073 |
| 77040310 | .01 | .01 | 1.8 | 1.48 | .005 | .005 | 1.5 | .077 |
| 77040311 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | 1.5 | .080 |
| 77040312 | .01 | .01 | 1.5 | 1.34 | .005 | .005 | 1.5 | .084 |
| 77040313 | .01 | .01 | 1.6 | 1.36 | .005 | .005 | 1.0 | .084 |
| 77040314 | .01 | .01 | 1.6 | 1.40 | .005 | .005 | 1.0 | .084 |
| 77040315 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .088 |
| 77040316 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .088 |
| 77040317 | .01 | .01 | 1.7 | 1.46 | .005 | .005 | 1.0 | .088 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77040318 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .088 |
| 77040319 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.0 | .084 |
| 77040320 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .080 |
| 77040321 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .080 |
| 77040322 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .077 |
| 77040323 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77040324 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 1.5 | .073 |
| 77040401 | .01 | .01 | 2.0 | 1.46 | .005 | .005 | 1.0 | .080 |
| 77040402 | .01 | .01 | 1.9 | 1.46 | .005 | .005 | 1.0 | .080 |
| 77040403 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 1.0 | .077 |
| 77040404 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 1.0 | .077 |
| 77040405 | .01 | .01 | 1.9 | 1.46 | .005 | .005 | 2.0 | .073 |
| 77040406 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77040407 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .073 |
| 77040408 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 2.0 | .069 |
| 77040409 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .069 |
| 77040410 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 2.0 | .069 |
| 77040411 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77040412 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | 7.293 |
| 77040413 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.0 | .069 |
| 77040414 | .01 | .01 | 1.8 | 1.40 | .005 | .005 | 1.0 | .073 |
| 77040415 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | 1.5 | .069 |
| 77040416 | .01 | .01 | 1.6 | 1.42 | .005 | .005 | 1.0 | .066 |
| 77040417 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.0 | .066 |
| 77040418 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040419 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040420 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040421 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040422 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040423 | .01 | .01 | 2.0 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040424 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040501 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040502 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 1.0 | .055 |
| 77040503 | .01 | .01 | 2.2 | 1.44 | .005 | .005 | 1.0 | .055 |
| 77040504 | .01 | .01 | 2.3 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040505 | .01 | .01 | 2.2 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040506 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .058 |
| 77040507 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .055 |
| 77040508 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.5 | .062 |
| 77040509 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 2.0 | .062 |
| 77040510 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040511 | .01 | .01 | 1.7 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040512 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040513 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 2.0 | .066 |
| 77040514 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.5 | .066 |
| 77040515 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 1.5 | .066 |
| 77040516 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.5 | .066 |
| 77040517 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 2.0 | .066 |
| 77040518 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 2.0 | .066 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77040519 | .01 | .01 | 1.9 | 1.42 | .005 | .005 | 1.0 | .062 |
| 77040520 | .01 | .01 | 2.0 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040521 | .01 | .01 | 2.1 | 1.44 | .005 | .005 | 1.0 | .062 |
| 77040522 | .01 | .01 | 1.8 | 1.46 | .005 | .005 | 1.0 | .062 |
| 77040523 | .01 | .01 | 1.9 | 1.46 | .005 | .005 | 1.0 | .062 |
| 77040524 | .01 | .01 | 2.1 | 1.46 | .005 | .005 | 1.0 | .066 |
| 77040601 | .01 | .01 | 2.1 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040602 | .01 | .01 | 2.0 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040603 | .01 | .01 | 2.1 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040604 | .01 | .01 | 2.1 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040605 | .01 | .01 | 2.2 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040606 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 1.0 | .066 |
| 77040607 | .01 | .01 | 2.0 | 1.46 | .005 | .005 | 1.0 | .062 |
| 77040608 | .01 | .01 | 2.4 | 1.44 | .005 | .005 | 2.0 | .058 |
| 77040609 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 2.0 | .062 |
| 77040610 | .01 | .01 | 1.9 | 1.44 | .005 | .005 | 2.0 | .066 |
| 77040611 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.5 | 7.293 |
| 77040612 | .01 | .01 | 2.3 | 1.70 | .005 | .005 | 2.0 | 7.293 |
| 77040613 | .01 | .01 | 1.8 | 1.44 | .005 | .005 | 1.5 | 7.293 |
| 77040614 | .01 | .01 | 1.8 | 1.42 | .005 | .005 | 1.0 | 7.293 |
| 77040615 | .01 | .01 | 1.7 | 1.42 | .005 | .005 | 2.0 | 7.293 |
| 77040616 | .01 | .01 | 1.9 | 1.48 | .005 | .005 | 2.5 | 7.293 |
| 77040617 | .01 | .01 | 1.9 | 1.50 | .005 | .005 | 1.5 | 7.293 |
| 77040618 | 9.99 | 9.99 | 2.0 | 1.48 | .005 | .005 | 1.5 | .084 |
| 77040619 | 9.99 | 9.99 | 1.9 | 1.46 | .005 | .005 | 2.0 | .080 |
| 77040620 | 9.99 | 9.99 | 1.9 | 1.46 | .005 | .005 | 1.0 | .080 |
| 77040621 | 9.99 | 9.99 | 1.7 | 1.46 | .005 | .005 | 1.0 | .080 |
| 77040622 | 9.99 | 9.99 | 1.6 | 1.46 | .005 | .005 | 1.0 | .073 |
| 77040623 | 9.99 | 9.99 | 1.7 | 1.48 | .005 | .005 | 1.0 | .073 |
| 77040624 | 9.99 | 9.99 | 1.7 | 1.48 | .005 | .005 | 1.0 | .069 |
| 77040701 | 9.99 | 9.99 | 1.7 | 1.48 | .005 | .005 | 1.0 | .069 |
| 77040702 | 9.99 | 9.99 | 1.9 | 1.48 | .005 | .005 | 1.5 | .069 |
| 77040703 | 9.99 | 9.99 | 1.8 | 1.48 | .005 | .005 | 1.5 | .069 |
| 77040704 | 9.99 | 9.99 | 1.9 | 1.48 | .005 | .005 | 1.5 | .073 |
| 77040705 | 9.99 | 9.99 | 1.9 | 1.48 | .005 | .005 | 1.5 | .073 |
| 77040706 | 9.99 | 9.99 | 2.1 | 1.48 | .005 | .005 | 1.5 | .073 |
| 77040707 | 9.99 | 9.99 | 2.0 | 1.46 | .005 | .005 | 1.5 | .073 |
| 77040708 | 9.99 | 9.99 | 2.1 | 1.46 | .005 | .005 | 1.5 | .073 |
| 77040709 | 9.99 | 9.99 | 2.0 | 1.48 | .005 | .005 | 2.0 | .077 |
| 77040710 | 9.99 | 9.99 | 1.8 | 1.46 | .005 | .005 | 2.0 | .077 |
| 77040711 | 9.99 | 9.99 | 1.8 | 1.46 | .005 | .005 | 1.5 | .080 |
| 77040712 | 9.99 | 9.99 | 1.8 | 1.44 | .005 | .005 | 1.5 | 7.293 |
| 77040713 | 9.99 | 9.99 | 1.8 | 1.46 | .005 | .005 | 1.5 | 7.293 |
| 77040714 | 9.99 | 9.99 | 1.8 | 1.46 | .005 | .005 | 1.5 | 7.293 |
| 77040715 | 9.99 | 9.99 | 1.7 | 1.44 | .005 | .005 | 1.5 | 7.293 |
| 77040716 | 9.99 | 9.99 | 1.7 | 1.42 | .005 | .005 | 1.5 | 7.293 |
| 77040717 | 9.99 | 9.99 | 1.6 | 1.40 | .005 | .005 | 1.0 | 7.293 |
| 77040718 | 9.99 | 9.99 | 1.6 | 1.40 | .005 | .005 | 1.0 | 7.293 |
| 77040719 | 9.99 | 9.99 | 1.7 | 1.42 | .005 | .005 | 10.0 | .069 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77040720 | 9.99 | 9.99 | 1.7 | 1.44 | .005 | .005 | 10.0 | .088 |
| 77040721 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .106 |
| 77040722 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .106 |
| 77040723 | .01 | .01 | 3.8 | 1.28 | .005 | .005 | .5 | .102 |
| 77040724 | .01 | .01 | 3.9 | 1.28 | .005 | .005 | .5 | .106 |
| 77040801 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .106 |
| 77040802 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .106 |
| 77040803 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .106 |
| 77040804 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .106 |
| 77040805 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .106 |
| 77040806 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .106 |
| 77040807 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .106 |
| 77040808 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .099 |
| 77040809 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .099 |
| 77040810 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .106 |
| 77040811 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .117 |
| 77040812 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .117 |
| 77040813 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .120 |
| 77040814 | .01 | .01 | 3.1 | 1.28 | .005 | .005 | .5 | .124 |
| 77040815 | .01 | .01 | 3.1 | 1.28 | .005 | .005 | .5 | .120 |
| 77040816 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .120 |
| 77040817 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .117 |
| 77040818 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .113 |
| 77040819 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .110 |
| 77040820 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .110 |
| 77040821 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .113 |
| 77040822 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .113 |
| 77040823 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .110 |
| 77040824 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .110 |
| 77040901 | .01 | .01 | 3.7 | 1.28 | .005 | .005 | .5 | .113 |
| 77040902 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .117 |
| 77040903 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .117 |
| 77040904 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .117 |
| 77040905 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .120 |
| 77040906 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .120 |
| 77040907 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .117 |
| 77040908 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .113 |
| 77040909 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .124 |
| 77040910 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .124 |
| 77040911 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .128 |
| 77040912 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .124 |
| 77040913 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .128 |
| 77040914 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .128 |
| 77040915 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .131 |
| 77040916 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .131 |
| 77040917 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .135 |
| 77040918 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .131 |
| 77040919 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .128 |
| 77040920 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .124 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77040921 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .117 |
| 77040922 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .117 |
| 77040923 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .117 |
| 77040924 | .01 | .01 | 4.0 | 1.28 | .005 | .005 | .5 | .117 |
| 77041001 | .01 | .01 | 3.9 | 1.30 | .005 | .005 | .5 | .113 |
| 77041002 | .01 | .01 | 3.8 | 1.28 | .005 | .005 | .5 | .113 |
| 77041003 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .110 |
| 77041004 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .110 |
| 77041005 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .110 |
| 77041006 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .110 |
| 77041007 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .110 |
| 77041008 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .117 |
| 77041009 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .120 |
| 77041010 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .120 |
| 77041011 | .01 | .01 | 3.1 | 1.28 | .005 | .005 | .5 | .120 |
| 77041012 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .120 |
| 77041013 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .120 |
| 77041014 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .120 |
| 77041015 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .120 |
| 77041016 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .124 |
| 77041017 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .128 |
| 77041018 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .128 |
| 77041019 | .01 | .01 | 3.3 | 1.26 | .005 | .005 | .5 | .120 |
| 77041020 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .117 |
| 77041021 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .113 |
| 77041022 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .117 |
| 77041023 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .117 |
| 77041024 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .117 |
| 77041101 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .113 |
| 77041102 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .106 |
| 77041103 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .102 |
| 77041104 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .102 |
| 77041105 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .099 |
| 77041106 | .01 | .01 | 3.9 | 1.32 | .005 | .005 | .5 | .088 |
| 77041107 | .01 | .01 | 3.6 | 1.32 | .005 | .005 | .5 | .084 |
| 77041108 | .01 | .01 | 3.6 | 1.34 | .005 | .005 | .5 | .084 |
| 77041109 | .01 | .01 | 3.6 | 1.34 | .005 | .005 | .5 | .095 |
| 77041110 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .131 |
| 77041111 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .128 |
| 77041112 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .120 |
| 77041113 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .117 |
| 77041114 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .117 |
| 77041115 | .01 | 9.99 | 3.2 | 1.30 | .005 | .005 | .5 | .113 |
| 77041116 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .117 |
| 77041117 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .117 |
| 77041118 | .01 | .01 | 3.2 | 1.30 | .005 | .005 | .5 | .117 |
| 77041119 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .117 |
| 77041120 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .110 |
| 77041121 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .110 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77041122 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .110 |
| 77041123 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .117 |
| 77041124 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .120 |
| 77041201 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .117 |
| 77041202 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .120 |
| 77041203 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .113 |
| 77041204 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .113 |
| 77041205 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .113 |
| 77041206 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .113 |
| 77041207 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .113 |
| 77041208 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .106 |
| 77041209 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .102 |
| 77041210 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .102 |
| 77041211 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .102 |
| 77041212 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .106 |
| 77041213 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .106 |
| 77041214 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .106 |
| 77041215 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .106 |
| 77041216 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .110 |
| 77041217 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .110 |
| 77041218 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .113 |
| 77041219 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .102 |
| 77041220 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .091 |
| 77041221 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .099 |
| 77041222 | .01 | .01 | 3.4 | 1.34 | .005 | .005 | .5 | .099 |
| 77041223 | .01 | .01 | 3.6 | 1.32 | .005 | .005 | .5 | .095 |
| 77041224 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .099 |
| 77041301 | .01 | .01 | 4.4 | 1.32 | .005 | .005 | .5 | .091 |
| 77041302 | .01 | .01 | 4.4 | 1.32 | .005 | .005 | .5 | .088 |
| 77041303 | .01 | .01 | 4.2 | 1.32 | .005 | .005 | .5 | .080 |
| 77041304 | .01 | .01 | 4.1 | 1.32 | .005 | .005 | .5 | .069 |
| 77041305 | .01 | .01 | 4.1 | 1.32 | .005 | .005 | .5 | .069 |
| 77041306 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .080 |
| 77041307 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .120 |
| 77041308 | .01 | .01 | 4.1 | 1.28 | .005 | .005 | .5 | .117 |
| 77041309 | .01 | .01 | 3.9 | 1.28 | .005 | .005 | .5 | .117 |
| 77041310 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .113 |
| 77041311 | .01 | .01 | 3.3 | 1.30 | .005 | .005 | .5 | .128 |
| 77041312 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .135 |
| 77041313 | .01 | .01 | 3.5 | 1.34 | .005 | .005 | .5 | .131 |
| 77041314 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .135 |
| 77041315 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .135 |
| 77041316 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .135 |
| 77041317 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .128 |
| 77041318 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .128 |
| 77041319 | .01 | .01 | 3.7 | 1.28 | .005 | .005 | .5 | .120 |
| 77041320 | .01 | .01 | 3.7 | 1.28 | .005 | .005 | .5 | .117 |
| 77041321 | .01 | .01 | 3.6 | 1.28 | .005 | .005 | .5 | .120 |
| 77041322 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .135 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77041323 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .131 |
| 77041324 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .135 |
| 77041401 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .128 |
| 77041402 | .01 | .01 | 3.7 | 1.28 | .005 | .005 | .5 | .120 |
| 77041403 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .120 |
| 77041404 | .01 | .01 | 3.9 | 1.28 | .005 | .005 | .5 | .131 |
| 77041405 | .01 | .01 | 4.2 | 1.28 | .005 | .005 | .5 | .131 |
| 77041406 | .01 | .01 | 3.9 | 1.28 | .005 | .005 | .5 | .124 |
| 77041407 | .01 | .01 | 3.8 | 1.28 | .005 | .005 | .5 | .120 |
| 77041408 | .01 | .01 | 3.9 | 1.28 | .005 | .005 | .5 | .124 |
| 77041409 | .01 | .01 | 3.7 | 1.28 | .005 | .005 | .5 | .124 |
| 77041410 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .120 |
| 77041411 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .120 |
| 77041412 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .124 |
| 77041413 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .128 |
| 77041414 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .128 |
| 77041415 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .128 |
| 77041416 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .124 |
| 77041417 | .01 | .01 | 3.2 | 1.26 | .005 | .005 | .5 | .120 |
| 77041418 | .01 | .01 | 3.1 | 1.30 | .005 | .005 | .5 | .120 |
| 77041419 | .01 | .01 | 3.1 | 1.28 | .005 | .005 | .5 | .120 |
| 77041420 | .01 | .01 | 3.1 | 1.28 | .005 | .005 | .5 | .135 |
| 77041421 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .150 |
| 77041422 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .131 |
| 77041423 | .01 | .01 | 3.7 | 1.30 | .005 | .005 | .5 | .117 |
| 77041424 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .113 |
| 77041501 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .110 |
| 77041502 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .113 |
| 77041503 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .113 |
| 77041504 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .106 |
| 77041505 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .110 |
| 77041506 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .113 |
| 77041507 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .106 |
| 77041508 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .102 |
| 77041509 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .091 |
| 77041510 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .084 |
| 77041511 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .084 |
| 77041512 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .088 |
| 77041513 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .088 |
| 77041514 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .095 |
| 77041515 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77041516 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .099 |
| 77041517 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .099 |
| 77041518 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .095 |
| 77041519 | .01 | .01 | 3.3 | 1.32 | .005 | .005 | .5 | .095 |
| 77041520 | .01 | .01 | 3.4 | 1.32 | .005 | .005 | .5 | .095 |
| 77041521 | .01 | .01 | 4.1 | 1.36 | .005 | .005 | .5 | .091 |
| 77041522 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .091 |
| 77041523 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .088 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77041524 | .01 | .01 | 3.6 | 1.32 | .005 | .005 | .5 | .084 |
| 77041601 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .080 |
| 77041602 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .080 |
| 77041603 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .088 |
| 77041604 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .084 |
| 77041605 | .01 | .01 | 4.4 | 1.32 | .005 | .005 | .5 | .073 |
| 77041606 | .01 | .01 | 4.4 | 1.32 | .005 | .005 | .5 | .077 |
| 77041607 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .084 |
| 77041608 | .01 | .01 | 3.6 | 1.32 | .005 | .005 | .5 | .091 |
| 77041609 | .01 | .01 | 3.5 | 1.32 | .005 | .005 | .5 | .099 |
| 77041610 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .102 |
| 77041611 | .01 | .01 | 3.7 | 1.32 | .005 | .005 | .5 | .102 |
| 77041612 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .099 |
| 77041613 | .01 | .01 | 3.6 | 1.32 | .005 | .005 | .5 | .102 |
| 77041614 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .110 |
| 77041615 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .117 |
| 77041616 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .117 |
| 77041617 | .01 | .01 | 3.6 | 1.28 | .005 | .005 | .5 | .124 |
| 77041618 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .113 |
| 77041619 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .102 |
| 77041620 | .01 | .01 | 4.3 | 1.30 | .005 | .005 | .5 | .102 |
| 77041621 | .01 | .01 | 4.4 | 1.32 | .005 | .005 | .5 | .102 |
| 77041622 | .01 | .01 | 4.4 | 1.32 | .005 | .005 | .5 | .102 |
| 77041623 | .01 | .01 | 4.2 | 1.34 | .005 | .005 | .5 | .102 |
| 77041624 | .01 | .01 | 3.9 | 1.32 | .005 | .005 | .5 | .106 |
| 77041701 | .01 | .01 | 3.9 | 1.32 | .005 | .005 | .5 | .110 |
| 77041702 | .01 | .01 | 4.0 | 1.32 | .005 | .005 | .5 | .117 |
| 77041703 | .01 | .01 | 4.3 | 1.30 | .005 | .005 | .5 | .113 |
| 77041704 | .01 | .01 | 4.1 | 1.32 | .005 | .005 | .5 | .117 |
| 77041705 | .01 | .01 | 4.1 | 1.30 | .005 | .005 | .5 | .117 |
| 77041706 | .01 | .01 | 3.8 | 1.32 | .005 | .005 | .5 | .117 |
| 77041707 | .01 | .01 | 4.3 | 1.30 | .005 | .005 | .5 | .106 |
| 77041708 | .01 | .01 | 4.1 | 1.30 | .005 | .005 | .5 | .110 |
| 77041709 | .01 | .01 | 3.8 | 1.30 | .005 | .005 | .5 | .106 |
| 77041710 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .110 |
| 77041711 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .117 |
| 77041712 | .01 | .01 | 3.3 | 1.26 | .005 | .005 | .5 | .117 |
| 77041713 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .117 |
| 77041714 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .124 |
| 77041715 | .01 | .01 | 3.1 | 1.24 | .005 | .005 | .5 | .131 |
| 77041716 | .01 | .01 | 3.0 | 1.24 | .005 | .005 | .5 | .135 |
| 77041717 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .128 |
| 77041718 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .142 |
| 77041719 | .01 | .01 | 3.5 | 1.28 | .005 | .005 | .5 | .117 |
| 77041720 | .01 | .01 | 3.9 | 1.28 | .005 | .005 | .5 | .110 |
| 77041721 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .110 |
| 77041722 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .106 |
| 77041723 | .01 | .01 | 3.5 | 1.30 | .005 | .005 | .5 | .099 |
| 77041724 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .095 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77041801 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .095 |
| 77041802 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .095 |
| 77041803 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .099 |
| 77041804 | .01 | .01 | 3.6 | 1.30 | .005 | .005 | .5 | .106 |
| 77041805 | .01 | .01 | 3.4 | 1.28 | .005 | .005 | .5 | .102 |
| 77041806 | .01 | .01 | 3.4 | 1.30 | .005 | .005 | .5 | .102 |
| 77041807 | .01 | .01 | 3.6 | 1.28 | .005 | .005 | .5 | .106 |
| 77041808 | .01 | .01 | 3.7 | 1.28 | .005 | .005 | .5 | .113 |
| 77041809 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .113 |
| 77041810 | .01 | .01 | 3.2 | 1.28 | .005 | .005 | .5 | .110 |
| 77041811 | .01 | .01 | 3.3 | 1.28 | .005 | .005 | .5 | .113 |
| 77041812 | .01 | .01 | 3.1 | 1.26 | .005 | .005 | .5 | .124 |
| 77041813 | .01 | .01 | 3.0 | 1.26 | .005 | .005 | .5 | .153 |
| 77041814 | .01 | .01 | 2.9 | 1.26 | .005 | .005 | .5 | .150 |
| 77041815 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | 7.293 |
| 77041816 | 9.99 | 9.99 | 3.1 | 1.28 | .005 | .005 | .5 | .102 |
| 77041817 | 9.99 | 9.99 | 3.0 | 1.28 | .005 | .005 | .5 | .110 |
| 77041818 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .110 |
| 77041819 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .102 |
| 77041820 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .102 |
| 77041821 | 9.99 | 9.99 | 3.3 | 1.34 | .005 | .005 | .5 | .106 |
| 77041822 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .106 |
| 77041823 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .110 |
| 77041824 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .110 |
| 77041901 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .106 |
| 77041902 | 9.99 | 9.99 | 3.5 | 1.34 | .005 | .005 | .5 | .102 |
| 77041903 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .113 |
| 77041904 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .106 |
| 77041905 | 9.99 | 9.99 | 3.4 | 1.34 | .005 | .005 | .5 | .117 |
| 77041906 | 9.99 | 9.99 | 3.4 | 1.32 | .005 | .005 | .5 | .120 |
| 77041907 | 9.99 | 9.99 | 3.5 | 1.34 | .005 | .005 | .5 | .120 |
| 77041908 | 9.99 | 9.99 | 3.5 | 1.34 | .005 | .005 | .5 | .120 |
| 77041909 | 9.99 | 9.99 | 3.4 | 1.32 | .005 | .005 | .5 | .117 |
| 77041910 | 9.99 | 9.99 | 3.3 | 1.32 | .005 | .005 | .5 | .120 |
| 77041911 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .128 |
| 77041912 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .099 |
| 77041913 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | .5 | .102 |
| 77041914 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 10.0 | .102 |
| 77041915 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 10.0 | .088 |
| 77041916 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 10.0 | .062 |
| 77041917 | 9.99 | 9.99 | 10.0 | 9.99 | .005 | .005 | 10.0 | .066 |
| 77041918 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77041919 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77041920 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77041921 | 9.99 | 9.99 | 10.0 | 9.99 | 9.990 | 9.990 | 10.0 | 7.293 |
| 77041922 | 9.99 | 9.99 | 2.8 | 1.32 | 9.990 | 9.990 | .5 | 7.293 |
| 77041923 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | .113 |
| 77041924 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .110 |
| 77042001 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | .110 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77042002 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .110 |
| 77042003 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .110 |
| 77042004 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .102 |
| 77042005 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .095 |
| 77042006 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .095 |
| 77042007 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .099 |
| 77042008 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .106 |
| 77042009 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .113 |
| 77042010 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | .117 |
| 77042011 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | .120 |
| 77042012 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | .128 |
| 77042013 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | .128 |
| 77042014 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | .005 | .5 | 7.293 |
| 77042015 | 9.99 | 9.99 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042016 | 9.99 | 9.99 | 2.9 | 1.32 | .005 | 9.990 | .5 | .131 |
| 77042017 | 9.99 | 9.99 | 2.8 | 1.32 | 9.990 | 9.990 | .5 | .131 |
| 77042018 | 9.99 | 9.99 | 2.9 | 1.32 | 9.990 | 9.990 | .5 | .128 |
| 77042019 | 9.99 | 9.99 | 2.9 | 1.32 | 9.990 | 9.990 | .5 | .120 |
| 77042020 | 9.99 | 9.99 | 2.9 | 1.34 | 9.990 | 9.990 | .5 | .117 |
| 77042021 | 9.99 | 9.99 | 2.9 | 1.34 | 9.990 | 9.990 | .5 | .120 |
| 77042022 | 9.99 | 9.99 | 2.9 | 1.36 | .005 | .005 | .5 | .128 |
| 77042023 | 9.99 | 9.99 | 2.9 | 1.36 | .005 | .005 | .5 | .128 |
| 77042024 | 9.99 | 9.99 | 2.9 | 1.36 | .005 | .005 | .5 | .128 |
| 77042101 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .124 |
| 77042102 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .117 |
| 77042103 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .117 |
| 77042104 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .120 |
| 77042105 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .120 |
| 77042106 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .124 |
| 77042107 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .120 |
| 77042108 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .124 |
| 77042109 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .128 |
| 77042110 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .131 |
| 77042111 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .135 |
| 77042112 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .135 |
| 77042113 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .139 |
| 77042114 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .131 |
| 77042115 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .124 |
| 77042116 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042117 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042118 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042119 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .117 |
| 77042120 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .117 |
| 77042121 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .117 |
| 77042122 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .120 |
| 77042123 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .124 |
| 77042124 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .120 |
| 77042201 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .110 |
| 77042202 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .113 |

RIO BLANCO OIL SHALE PROJECT

| DATE | SO2 | H2S | THC | CH4 | NOX | NO | CO | O3 |
|---|---|---|---|---|---|---|---|---|
| 77042203 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .117 |
| 77042204 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .117 |
| 77042205 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .128 |
| 77042206 | .01 | .01 | 3.0 | 1.38 | .005 | .005 | .5 | .128 |
| 77042207 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .120 |
| 77042208 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .110 |
| 77042209 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .124 |
| 77042210 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .124 |
| 77042211 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .135 |
| 77042212 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .135 |
| 77042213 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .135 |
| 77042214 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .135 |
| 77042215 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .135 |
| 77042216 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .131 |
| 77042217 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | .131 |
| 77042218 | .01 | .01 | 2.8 | 1.28 | .005 | .005 | .5 | .128 |
| 77042219 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .120 |
| 77042220 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .117 |
| 77042221 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .124 |
| 77042222 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042223 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042224 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | .5 | .128 |
| 77042301 | .01 | .01 | 3.0 | 1.34 | .005 | .005 | .5 | .135 |
| 77042302 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .135 |
| 77042303 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .131 |
| 77042304 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .131 |
| 77042305 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .128 |
| 77042306 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .124 |
| 77042307 | .01 | .01 | 3.0 | 1.36 | .005 | .005 | .5 | .117 |
| 77042308 | .01 | .01 | 2.9 | 1.36 | .005 | .005 | .5 | .117 |
| 77042309 | .01 | .01 | 3.0 | 1.34 | .005 | .005 | .5 | .117 |
| 77042310 | .01 | .01 | 2.9 | 1.32 | .005 | .005 | .5 | .124 |
| 77042311 | .01 | .01 | 2.9 | 1.34 | .005 | .005 | 10.0 | .135 |
| 77042312 | .01 | .01 | 2.9 | 1.30 | .005 | .005 | 10.0 | .139 |
| 77042313 | .01 | .01 | 2.9 | 1.32 | .005 | .005 | .5 | .135 |
| 77042314 | .01 | .01 | 2.8 | 1.30 | .005 | .005 | .5 | .135 |
| 77042315 | .01 | .01 | 10.0 | 9.99 | .005 | .005 | .5 | 7.293 |
| 77042316 | .01 | .01 | 2.8 | 1.28 | .005 | .005 | .5 | .139 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 18 | 8 | 0.005 | 2.767 | 0.005 | 0.5 | 0.005 | 1.254 | 0.005 | 0.061 | 2.445 |
| 77 | 5 | 18 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 18 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 18 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 18 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 18 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 18 | 14 | 0.005 | 2.743 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.059 | 2.444 |
| 77 | 5 | 18 | 15 | 0.005 | 2.751 | 0.005 | 0.5 | 0.005 | 1.250 | 0.005 | 0.058 | 2.444 |
| 77 | 5 | 18 | 16 | 0.005 | 2.752 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.058 | 2.444 |
| 77 | 5 | 18 | 17 | 0.005 | 2.766 | 0.005 | 0.5 | 0.005 | 1.249 | 0.005 | 0.059 | 2.443 |
| 77 | 5 | 18 | 18 | 0.005 | 2.737 | 0.005 | 0.5 | 0.005 | 1.264 | 0.005 | 0.056 | 2.444 |
| 77 | 5 | 18 | 19 | 0.005 | 2.786 | 0.005 | 0.5 | 0.005 | 1.205 | 0.005 | 0.055 | 2.444 |
| 77 | 5 | 18 | 20 | 0.005 | 2.774 | 0.005 | 0.5 | 0.005 | 1.245 | 0.005 | 0.054 | 2.444 |
| 77 | 5 | 18 | 21 | 0.005 | 2.788 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.053 | 2.443 |
| 77 | 5 | 18 | 22 | 0.005 | 2.829 | 0.005 | 0.5 | 0.005 | 1.274 | 0.005 | 0.050 | 2.443 |
| 77 | 5 | 18 | 23 | 0.005 | 2.798 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.049 | 2.442 |
| 77 | 5 | 18 | 24 | 0.005 | 2.787 | 0.005 | 0.5 | 0.005 | 1.266 | 0.005 | 0.051 | 2.440 |
| 77 | 5 | 19 | 1 | 0.005 | 2.815 | 0.005 | 0.5 | 0.005 | 1.265 | 0.005 | 0.051 | 2.441 |
| 77 | 5 | 19 | 2 | 0.005 | 2.602 | 0.005 | 0.5 | 0.005 | 1.161 | 0.005 | 0.050 | 2.437 |
| 77 | 5 | 19 | 3 | 0.005 | 2.829 | 0.005 | 0.5 | 0.005 | 1.284 | 0.005 | 0.050 | 2.441 |
| 77 | 5 | 19 | 4 | 0.005 | 2.775 | 0.005 | 0.5 | 0.005 | 1.206 | 0.005 | 0.047 | 2.439 |
| 77 | 5 | 19 | 5 | 0.005 | 2.710 | 0.005 | 0.5 | 0.005 | 1.138 | 0.005 | 0.047 | 2.444 |
| 77 | 5 | 19 | 6 | 0.005 | 2.795 | 0.005 | 0.5 | 0.005 | 1.153 | 0.005 | 0.050 | 2.446 |
| 77 | 5 | 19 | 7 | 0.005 | 2.614 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.052 | 2.445 |
| 77 | 5 | 19 | 8 | 0.005 | 2.670 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.052 | 2.446 |
| 77 | 5 | 19 | 9 | 0.005 | 2.755 | 0.005 | 0.5 | 0.005 | 1.262 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 19 | 10 | 0.005 | 2.761 | 0.005 | 0.5 | 0.005 | 1.134 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 19 | 11 | 0.005 | 2.808 | 0.005 | 0.5 | 0.005 | 1.280 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 19 | 12 | 0.005 | 2.819 | 0.005 | 0.5 | 0.029 | 1.280 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 19 | 13 | 0.005 | 2.775 | 0.005 | 0.5 | 0.005 | 1.263 | 0.005 | 0.050 | 2.444 |
| 77 | 5 | 19 | 14 | 0.005 | 2.695 | 0.005 | 0.5 | 0.005 | 1.235 | 0.005 | 0.049 | 2.445 |
| 77 | 5 | 19 | 15 | 0.005 | 2.691 | 0.005 | 0.5 | 0.005 | 1.247 | 0.005 | 0.047 | 2.444 |
| 77 | 5 | 19 | 16 | 0.005 | 2.757 | 0.005 | 0.5 | 0.005 | 1.241 | 0.005 | 0.046 | 2.444 |
| 77 | 5 | 19 | 17 | 0.005 | 2.268 | 0.005 | 0.5 | 0.005 | 1.015 | 0.005 | 0.046 | 2.444 |
| 77 | 5 | 19 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 19 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 19 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 19 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 19 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 19 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 19 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 20 | 8 | 0.005 | 2.582 | 0.005 | 0.5 | 0.005 | 1.280 | 0.005 | 0.047 | 2.442 |
| 77 | 5 | 20 | 9 | 0.005 | 1.532 | 0.005 | 0.5 | 0.005 | 0.701 | 0.005 | 0.047 | 2.444 |
| 77 | 5 | 20 | 10 | 0.005 | 0.098 | 0.005 | 0.5 | 0.005 | 0.004 | 0.005 | 0.047 | 2.444 |
| 77 | 5 | 20 | 11 | 0.005 | 0.5[illegible]4 | 0.005 | 0.5 | 0.005 | 0.217 | 0.005 | 0.047 | 2.443 |
| 77 | 5 | 20 | 12 | 0.005 | 1.302 | 0.005 | 0.5 | 0.005 | 0.798 | 0.005 | 0.048 | 2.441 |
| 77 | 5 | 20 | 13 | 0.005 | 1.221 | 0.005 | 0.5 | 0.005 | 0.889 | 0.005 | 0.049 | 2.440 |
| 77 | 5 | 20 | 14 | 0.005 | 1.119 | 0.005 | 0.5 | 0.005 | 0.802 | 0.005 | 0.050 | 2.442 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 20 | 15 | 0.005 | 0.534 | 0.005 | 0.5 | 0.005 | 0.357 | 0.005 | 0.051 | 2.442 |
| 77 | 5 | 20 | 16 | 0.005 | 0.097 | 0.005 | 0.5 | 0.005 | 0.006 | 0.005 | 0.044 | 2.441 |
| 77 | 5 | 20 | 17 | 0.005 | 0.148 | 0.005 | 0.5 | 0.005 | 0.007 | 0.005 | 0.040 | 2.441 |
| 77 | 5 | 20 | 18 | 0.005 | 0.264 | 0.005 | 0.5 | 0.005 | 0.025 | 0.005 | 0.052 | 2.441 |
| 77 | 5 | 20 | 19 | 0.005 | 0.150 | 0.005 | 0.5 | 0.005 | 0.023 | 0.005 | 0.057 | 2.439 |
| 77 | 5 | 20 | 20 | 0.005 | 0.572 | 0.005 | 0.5 | 0.005 | 0.573 | 0.005 | 0.054 | 2.437 |
| 77 | 5 | 20 | 21 | 0.005 | 0.563 | 0.005 | 0.5 | 0.005 | 0.292 | 0.005 | 0.052 | 2.436 |
| 77 | 5 | 20 | 22 | 0.005 | 0.233 | 0.005 | 0.5 | 0.005 | 0.417 | 0.005 | 0.050 | 2.435 |
| 77 | 5 | 20 | 23 | 0.005 | 0.992 | 0.005 | 0.5 | 0.005 | 0.855 | 0.005 | 0.049 | 2.434 |
| 77 | 5 | 20 | 24 | 0.005 | 1.902 | 0.005 | 0.5 | 0.005 | 1.213 | 0.005 | 0.049 | 2.445 |
| 77 | 5 | 21 | 1 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.046 | 2.444 |
| 77 | 5 | 21 | 2 | 0.005 | 1.899 | 0.005 | 0.5 | 0.005 | 1.207 | 0.005 | 0.046 | 2.445 |
| 77 | 5 | 21 | 3 | 0.005 | 1.897 | 0.005 | 0.5 | 0.005 | 1.209 | 0.005 | 0.048 | 2.445 |
| 77 | 5 | 21 | 4 | 0.005 | 1.899 | 0.005 | 0.5 | 0.005 | 1.210 | 0.005 | 0.050 | 2.444 |
| 77 | 5 | 21 | 5 | 0.005 | 1.905 | 0.005 | 0.5 | 0.005 | 1.213 | 0.005 | 0.050 | 2.445 |
| 77 | 5 | 21 | 6 | 0.005 | 1.997 | 0.005 | 0.5 | 0.005 | 1.243 | 0.005 | 0.047 | 2.444 |
| 77 | 5 | 21 | 7 | 0.005 | 1.945 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.049 | 2.446 |
| 77 | 5 | 21 | 8 | 0.005 | 1.897 | 0.005 | 0.5 | 0.005 | 1.204 | 0.005 | 0.052 | 2.447 |
| 77 | 5 | 21 | 9 | 0.005 | 1.892 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.055 | 2.446 |
| 77 | 5 | 21 | 10 | 0.005 | 1.876 | 0.005 | 0.5 | 0.005 | 1.195 | 0.005 | 0.056 | 2.445 |
| 77 | 5 | 21 | 11 | 0.005 | 1.893 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.058 | 2.443 |
| 77 | 5 | 21 | 12 | 0.005 | 1.879 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.060 | 2.443 |
| 77 | 5 | 21 | 13 | 0.005 | 1.873 | 0.005 | 0.5 | 0.005 | 1.185 | 0.005 | 0.059 | 2.443 |
| 77 | 5 | 21 | 14 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.059 | 2.445 |
| 77 | 5 | 21 | 15 | 0.005 | 1.841 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.060 | 2.443 |
| 77 | 5 | 21 | 16 | 0.005 | 1.832 | 0.005 | 0.5 | 0.005 | 1.167 | 0.005 | 0.061 | 2.443 |
| 77 | 5 | 21 | 17 | 0.005 | 1.839 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.061 | 2.442 |
| 77 | 5 | 21 | 18 | 0.005 | 1.852 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.061 | 2.441 |
| 77 | 5 | 21 | 19 | 0.005 | 1.857 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.057 | 2.441 |
| 77 | 5 | 21 | 20 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.057 | 2.442 |
| 77 | 5 | 21 | 21 | 0.005 | 1.890 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.057 | 2.441 |
| 77 | 5 | 21 | 22 | 0.005 | 1.901 | 0.005 | 0.5 | 0.005 | 1.200 | 0.005 | 0.056 | 2.442 |
| 77 | 5 | 21 | 23 | 0.005 | 1.889 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.056 | 2.442 |
| 77 | 5 | 21 | 24 | 0.005 | 1.888 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.059 | 2.442 |
| 77 | 5 | 22 | 1 | 0.005 | 1.884 | 0.005 | 0.5 | 0.005 | 1.200 | 0.005 | 0.058 | 2.442 |
| 77 | 5 | 22 | 2 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.200 | 0.005 | 0.059 | 2.442 |
| 77 | 5 | 22 | 3 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.056 | 2.442 |
| 77 | 5 | 22 | 4 | 0.005 | 1.882 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.057 | 2.442 |
| 77 | 5 | 22 | 5 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.057 | 2.442 |
| 77 | 5 | 22 | 6 | 0.005 | 1.880 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.058 | 2.442 |
| 77 | 5 | 22 | 7 | 0.005 | 1.866 | 0.005 | 0.5 | 0.005 | 1.185 | 0.005 | 0.054 | 2.442 |
| 77 | 5 | 22 | 8 | 0.005 | 1.870 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.058 | 2.442 |
| 77 | 5 | 22 | 9 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.060 | 2.442 |
| 77 | 5 | 22 | 10 | 0.005 | 1.861 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.060 | 2.442 |
| 77 | 5 | 22 | 11 | 0.005 | 1.878 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.062 | 2.441 |
| 77 | 5 | 22 | 12 | 0.005 | 1.852 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.062 | 2.441 |
| 77 | 5 | 22 | 13 | 0.005 | 1.817 | 0.005 | 0.5 | 0.005 | 1.155 | 0.005 | 0.060 | 2.441 |
| 77 | 5 | 22 | 14 | 0.005 | 1.800 | 0.005 | 0.5 | 0.005 | 1.147 | 0.005 | 0.060 | 2.441 |
| 77 | 5 | 22 | 15 | 0.005 | 1.793 | 0.005 | 0.5 | 0.005 | 1.143 | 0.005 | 0.059 | 2.442 |
| 77 | 5 | 22 | 16 | 0.005 | 1.796 | 0.005 | 0.5 | 0.005 | 1.147 | 0.005 | 0.059 | 2.442 |
| 77 | 5 | 22 | 17 | 0.005 | 1.806 | 0.005 | 0.5 | 0.005 | 1.152 | 0.005 | 0.060 | 2.443 |
| 77 | 5 | 22 | 18 | 0.005 | 1.820 | 0.005 | 0.5 | 0.005 | 1.162 | 0.005 | 0.060 | 2.443 |
| 77 | 5 | 22 | 19 | 0.005 | 1.831 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.059 | 2.443 |
| 77 | 5 | 22 | 20 | 0.005 | 1.848 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.057 | 2.443 |
| 77 | 5 | 22 | 21 | 0.005 | 1.857 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.057 | 2.443 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 22 | 22 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.058 | 2.443 |
| 77 | 5 | 22 | 23 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.057 | 2.443 |
| 77 | 5 | 22 | 24 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.058 | 2.443 |
| 77 | 5 | 23 | 1 | 0.005 | 1.849 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.057 | 2.443 |
| 77 | 5 | 23 | 2 | 0.005 | 1.851 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.057 | 2.443 |
| 77 | 5 | 23 | 3 | 0.005 | 1.856 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.057 | 2.444 |
| 77 | 5 | 23 | 4 | 0.005 | 1.851 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.058 | 2.444 |
| 77 | 5 | 23 | 5 | 0.005 | 1.857 | 0.005 | 0.5 | 0.005 | 1.190 | 0.005 | 0.058 | 2.444 |
| 77 | 5 | 23 | 6 | 0.005 | 1.863 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.054 | 2.444 |
| 77 | 5 | 23 | 7 | 0.005 | 1.859 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.058 | 2.444 |
| 77 | 5 | 23 | 8 | 0.005 | 1.855 | 0.005 | 0.5 | 0.005 | 1.185 | 0.005 | 0.062 | 2.443 |
| 77 | 5 | 23 | 9 | 0.005 | 1.846 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.065 | 2.443 |
| 77 | 5 | 23 | 10 | 0.005 | 1.838 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.069 | 2.442 |
| 77 | 5 | 23 | 11 | 0.005 | 1.831 | 0.005 | 0.5 | 0.005 | 1.177 | 0.005 | 0.068 | 2.442 |
| 77 | 5 | 23 | 12 | 0.005 | 1.831 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.067 | 2.442 |
| 77 | 5 | 23 | 13 | 0.005 | 1.225 | 0.005 | 9.4 | 0.005 | 0.846 | 0.005 | 0.058 | 2.442 |
| 77 | 5 | 23 | 14 | 0.005 | 1.806 | 0.005 | 0.5 | 0.005 | 1.159 | 0.005 | 0.068 | 2.442 |
| 77 | 5 | 23 | 15 | 0.005 | 1.813 | 0.005 | 0.5 | 0.005 | 1.159 | 0.005 | 0.071 | 2.442 |
| 77 | 5 | 23 | 16 | 0.005 | 1.833 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.070 | 2.442 |
| 77 | 5 | 23 | 17 | 0.005 | 1.846 | 0.106 | 0.5 | 0.005 | 1.181 | 0.005 | 0.071 | 2.442 |
| 77 | 5 | 23 | 18 | 0.141 | 1.844 | 0.303 | 0.5 | 0.005 | 1.179 | 0.005 | 0.069 | 2.442 |
| 77 | 5 | 23 | 19 | 0.005 | 1.840 | 0.012 | 0.5 | 0.005 | 1.180 | 0.005 | 0.065 | 2.442 |
| 77 | 5 | 23 | 20 | 0.005 | 1.848 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.064 | 2.443 |
| 77 | 5 | 23 | 21 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.063 | 2.443 |
| 77 | 5 | 23 | 22 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.187 | 0.005 | 0.063 | 2.443 |
| 77 | 5 | 23 | 23 | 0.005 | 1.845 | 0.005 | 0.5 | 0.005 | 1.186 | 0.005 | 0.062 | 2.442 |
| 77 | 5 | 23 | 24 | 0.005 | 1.843 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.061 | 2.442 |
| 77 | 5 | 24 | 1 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.059 | 2.442 |
| 77 | 5 | 24 | 2 | 0.005 | 1.844 | 0.005 | 0.5 | 0.005 | 1.185 | 0.005 | 0.059 | 2.441 |
| 77 | 5 | 24 | 3 | 0.005 | 1.847 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.058 | 2.441 |
| 77 | 5 | 24 | 4 | 0.005 | 1.841 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.056 | 2.441 |
| 77 | 5 | 24 | 5 | 0.005 | 1.864 | 0.005 | 0.5 | 0.005 | 1.176 | 0.005 | 0.055 | 2.441 |
| 77 | 5 | 24 | 6 | 0.005 | 1.884 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.054 | 2.441 |
| 77 | 5 | 24 | 7 | 0.005 | 1.842 | 0.005 | 0.5 | 0.005 | 1.177 | 0.005 | 0.057 | 2.441 |
| 77 | 5 | 24 | 8 | 0.005 | 1.835 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.058 | 2.440 |
| 77 | 5 | 24 | 9 | 0.005 | 1.535 | 0.005 | 0.5 | 0.005 | 1.059 | 0.005 | 0.059 | 2.441 |
| 77 | 5 | 24 | 10 | 0.005 | 2.838 | 0.005 | 0.5 | 0.005 | 1.144 | 0.005 | 0.059 | 2.441 |
| 77 | 5 | 24 | 11 | 0.005 | 1.842 | 0.005 | 0.5 | 0.005 | 1.161 | 0.005 | 0.060 | 2.442 |
| 77 | 5 | 24 | 12 | 0.005 | 1.811 | 0.005 | 0.5 | 0.005 | 1.162 | 0.005 | 0.059 | 2.441 |
| 77 | 5 | 24 | 13 | 0.005 | 1.804 | 0.005 | 0.5 | 0.005 | 1.158 | 0.005 | 0.058 | 2.441 |
| 77 | 5 | 24 | 14 | 0.005 | 1.820 | 0.005 | 0.5 | 0.005 | 1.165 | 0.005 | 0.060 | 2.441 |
| 77 | 5 | 24 | 15 | 0.005 | 1.834 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.060 | 2.441 |
| 77 | 5 | 24 | 16 | 0.005 | 1.831 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.059 | 2.441 |
| 77 | 5 | 24 | 17 | 0.005 | 1.838 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.056 | 2.441 |
| 77 | 5 | 24 | 18 | 0.005 | 1.838 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.054 | 2.441 |
| 77 | 5 | 24 | 19 | 0.005 | 1.840 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.051 | 2.440 |
| 77 | 5 | 24 | 20 | 0.005 | 1.827 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.052 | 2.441 |
| 77 | 5 | 24 | 21 | 0.005 | 1.826 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.052 | 2.440 |
| 77 | 5 | 24 | 22 | 0.005 | 1.828 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.051 | 2.439 |
| 77 | 5 | 24 | 23 | 0.005 | 1.835 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.050 | 2.441 |
| 77 | 5 | 24 | 24 | 0.005 | 1.829 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.055 | 2.441 |
| 77 | 5 | 25 | 1 | 0.005 | 1.840 | 0.005 | 0.5 | 0.005 | 1.178 | 0.005 | 0.057 | 2.440 |
| 77 | 5 | 25 | 2 | 0.005 | 1.845 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.056 | 2.441 |
| 77 | 5 | 25 | 3 | 0.005 | 1.843 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.055 | 2.441 |
| 77 | 5 | 25 | 4 | 0.005 | 1.860 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.051 | 2.440 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 25 | 5 | 0.005 | 1.865 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.046 | 2.440 |
| 77 | 5 | 25 | 6 | 0.005 | 1.855 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.046 | 2.441 |
| 77 | 5 | 25 | 7 | 0.005 | 1.858 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.049 | 2.441 |
| 77 | 5 | 25 | 8 | 0.005 | 1.859 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.050 | 2.441 |
| 77 | 5 | 25 | 9 | 0.005 | 1.849 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.050 | 2.439 |
| 77 | 5 | 25 | 10 | 0.005 | 1.838 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.052 | 2.439 |
| 77 | 5 | 25 | 11 | 0.005 | 1.836 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.053 | 2.440 |
| 77 | 5 | 25 | 12 | 0.005 | 1.831 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.053 | 2.440 |
| 77 | 5 | 25 | 13 | 0.005 | 1.815 | 0.005 | 0.5 | 0.005 | 1.165 | 0.005 | 0.055 | 2.439 |
| 77 | 5 | 25 | 14 | 0.005 | 1.813 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.056 | 2.439 |
| 77 | 5 | 25 | 15 | 0.005 | 1.813 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.056 | 2.439 |
| 77 | 5 | 25 | 16 | 0.005 | 1.806 | 0.005 | 0.5 | 0.005 | 1.161 | 0.005 | 0.056 | 2.439 |
| 77 | 5 | 25 | 17 | 0.005 | 1.818 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.056 | 2.438 |
| 77 | 5 | 25 | 18 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.052 | 2.439 |
| 77 | 5 | 25 | 19 | 0.005 | 1.884 | 0.005 | 0.5 | 0.005 | 1.200 | 0.005 | 0.049 | 2.439 |
| 77 | 5 | 25 | 20 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.048 | 2.439 |
| 77 | 5 | 25 | 21 | 0.005 | 1.882 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.050 | 2.438 |
| 77 | 5 | 25 | 22 | 0.005 | 1.902 | 0.005 | 0.5 | 0.005 | 1.204 | 0.005 | 0.049 | 2.439 |
| 77 | 5 | 25 | 23 | 0.005 | 1.872 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.053 | 2.436 |
| 77 | 5 | 25 | 24 | 0.005 | 1.880 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.050 | 2.435 |
| 77 | 5 | 26 | 1 | 0.005 | 1.856 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.049 | 2.437 |
| 77 | 5 | 26 | 2 | 0.005 | 1.852 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.047 | 2.435 |
| 77 | 5 | 26 | 3 | 0.005 | 1.852 | 0.005 | 0.5 | 0.005 | 1.185 | 0.005 | 0.046 | 2.438 |
| 77 | 5 | 26 | 4 | 0.005 | 1.856 | 0.005 | 0.5 | 0.005 | 1.186 | 0.005 | 0.048 | 2.438 |
| 77 | 5 | 26 | 5 | 0.005 | 1.862 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.045 | 2.433 |
| 77 | 5 | 26 | 6 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.041 | 2.435 |
| 77 | 5 | 26 | 7 | 0.005 | 1.853 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.052 | 2.444 |
| 77 | 5 | 26 | 8 | 0.005 | 1.845 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.062 | 2.445 |
| 77 | 5 | 26 | 9 | 0.005 | 1.843 | 0.005 | 0.5 | 0.005 | 1.178 | 0.005 | 0.064 | 2.445 |
| 77 | 5 | 26 | 10 | 0.005 | 1.838 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.059 | 2.445 |
| 77 | 5 | 26 | 11 | 0.005 | 1.826 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.065 | 2.445 |
| 77 | 5 | 26 | 12 | 0.005 | 1.819 | 0.005 | 0.5 | 0.005 | 1.167 | 0.005 | 0.065 | 2.445 |
| 77 | 5 | 26 | 13 | 0.005 | 1.815 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.067 | 2.445 |
| 77 | 5 | 26 | 14 | 0.005 | 1.807 | 0.005 | 0.5 | 0.005 | 1.161 | 0.005 | 0.069 | 2.445 |
| 77 | 5 | 26 | 15 | 0.005 | 1.817 | 0.005 | 0.5 | 0.005 | 1.166 | 0.005 | 0.068 | 2.445 |
| 77 | 5 | 26 | 16 | 0.005 | 1.817 | 0.005 | 0.5 | 0.005 | 1.162 | 0.005 | 0.066 | 2.445 |
| 77 | 5 | 26 | 17 | 0.005 | 1.790 | 0.005 | 0.5 | 0.005 | 1.153 | 0.005 | 0.067 | 2.445 |
| 77 | 5 | 26 | 18 | 0.005 | 1.824 | 0.005 | 0.5 | 0.005 | 1.169 | 0.005 | 0.064 | 2.445 |
| 77 | 5 | 26 | 19 | 0.005 | 1.847 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.062 | 2.446 |
| 77 | 5 | 26 | 20 | 0.005 | 1.840 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.063 | 2.446 |
| 77 | 5 | 26 | 21 | 0.005 | 1.844 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.063 | 2.446 |
| 77 | 5 | 26 | 22 | 0.005 | 1.846 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.061 | 2.446 |
| 77 | 5 | 26 | 23 | 0.005 | 1.838 | 0.005 | 0.5 | 0.005 | 1.177 | 0.005 | 0.061 | 2.446 |
| 77 | 5 | 26 | 24 | 0.005 | 1.830 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.061 | 2.446 |
| 77 | 5 | 27 | 1 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.060 | 2.446 |
| 77 | 5 | 27 | 2 | 0.005 | 1.930 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.060 | 2.446 |
| 77 | 5 | 27 | 3 | 0.005 | 1.824 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.059 | 2.446 |
| 77 | 5 | 27 | 4 | 0.005 | 1.824 | 0.005 | 0.5 | 0.005 | 1.167 | 0.005 | 0.058 | 2.446 |
| 77 | 5 | 27 | 5 | 0.005 | 1.830 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.060 | 2.446 |
| 77 | 5 | 27 | 6 | 0.005 | 1.830 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.062 | 2.446 |
| 77 | 5 | 27 | 7 | 0.005 | 1.833 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.063 | 2.446 |
| 77 | 5 | 27 | 8 | 0.005 | 1.842 | 0.005 | 0.5 | 0.005 | 1.178 | 0.005 | 0.061 | 2.446 |
| 77 | 5 | 27 | 9 | 0.005 | 1.836 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.064 | 2.445 |
| 77 | 5 | 27 | 10 | 0.005 | 1.942 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.052 | 2.446 |
| 77 | 5 | 27 | 11 | 0.005 | 1.832 | 0.005 | 0.5 | 0.005 | 1.178 | 0.005 | 0.066 | 2.446 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 27 | 12 | 0.005 | 1.835 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.067 | 2.446 |
| 77 | 5 | 27 | 13 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.185 | 0.005 | 0.066 | 2.446 |
| 77 | 5 | 27 | 14 | 0.005 | 1.836 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.066 | 2.446 |
| 77 | 5 | 27 | 15 | 0.005 | 1.802 | 0.005 | 0.5 | 0.005 | 1.152 | 0.005 | 0.067 | 2.445 |
| 77 | 5 | 27 | 16 | 0.005 | 1.769 | 0.005 | 0.5 | 0.005 | 1.135 | 0.005 | 0.068 | 2.444 |
| 77 | 5 | 27 | 17 | 0.005 | 1.741 | 0.005 | 0.5 | 0.005 | 1.117 | 0.005 | 0.070 | 2.442 |
| 77 | 5 | 27 | 18 | 0.005 | 1.752 | 0.005 | 0.5 | 0.005 | 1.126 | 0.005 | 0.067 | 2.442 |
| 77 | 5 | 27 | 19 | 0.005 | 1.785 | 0.005 | 0.5 | 0.005 | 1.130 | 0.005 | 0.054 | 2.443 |
| 77 | 5 | 27 | 20 | 0.005 | 1.787 | 0.005 | 0.5 | 0.005 | 1.144 | 0.005 | 0.055 | 2.443 |
| 77 | 5 | 27 | 21 | 0.005 | 1.807 | 0.005 | 0.5 | 0.005 | 1.157 | 0.005 | 0.058 | 2.444 |
| 77 | 5 | 27 | 22 | 0.005 | 1.616 | 0.005 | 0.5 | 0.005 | 1.161 | 0.005 | 0.048 | 2.445 |
| 77 | 5 | 27 | 23 | 0.005 | 1.830 | 0.005 | 0.5 | 0.005 | 1.167 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 27 | 24 | 0.005 | 1.822 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.046 | 2.445 |
| 77 | 5 | 28 | 1 | 0.005 | 1.818 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.055 | 2.445 |
| 77 | 5 | 28 | 2 | 0.005 | 1.805 | 0.005 | 0.5 | 0.005 | 1.159 | 0.005 | 0.056 | 2.445 |
| 77 | 5 | 28 | 3 | 0.005 | 1.828 | 0.005 | 0.5 | 0.005 | 1.160 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 28 | 4 | 0.005 | 1.819 | 0.005 | 0.5 | 0.005 | 1.158 | 0.005 | 0.048 | 2.445 |
| 77 | 5 | 28 | 5 | 0.005 | 1.807 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.053 | 2.445 |
| 77 | 5 | 28 | 6 | 0.005 | 1.815 | 0.005 | 0.5 | 0.005 | 1.157 | 0.005 | 0.051 | 2.445 |
| 77 | 5 | 28 | 7 | 0.005 | 1.803 | 0.005 | 0.5 | 0.005 | 1.148 | 0.005 | 0.051 | 2.444 |
| 77 | 5 | 28 | 8 | 0.005 | 1.782 | 0.005 | 0.5 | 0.005 | 1.134 | 0.005 | 0.053 | 2.443 |
| 77 | 5 | 28 | 9 | 0.005 | 1.742 | 0.005 | 0.5 | 0.005 | 1.115 | 0.005 | 0.062 | 2.442 |
| 77 | 5 | 28 | 10 | 0.005 | 1.760 | 0.005 | 0.5 | 0.005 | 1.129 | 0.005 | 0.059 | 2.442 |
| 77 | 5 | 28 | 11 | 0.005 | 1.721 | 0.005 | 0.5 | 0.005 | 1.106 | 0.005 | 0.064 | 2.442 |
| 77 | 5 | 28 | 12 | 0.005 | 1.760 | 0.005 | 0.5 | 0.005 | 1.129 | 0.005 | 0.057 | 2.442 |
| 77 | 5 | 28 | 13 | 0.005 | 1.766 | 0.005 | 0.5 | 0.005 | 1.131 | 0.005 | 0.057 | 2.443 |
| 77 | 5 | 28 | 14 | 0.005 | 1.755 | 0.005 | 0.5 | 0.005 | 1.123 | 0.005 | 0.060 | 2.443 |
| 77 | 5 | 28 | 15 | 0.005 | 1.713 | 0.005 | 0.5 | 0.005 | 1.097 | 0.005 | 0.064 | 2.442 |
| 77 | 5 | 28 | 16 | 0.005 | 1.717 | 0.005 | 0.5 | 0.005 | 1.092 | 0.005 | 0.065 | 2.441 |
| 77 | 5 | 28 | 17 | 0.005 | 1.733 | 0.005 | 0.6 | 0.005 | 1.111 | 0.005 | 0.065 | 2.441 |
| 77 | 5 | 28 | 18 | 0.005 | 1.716 | 0.005 | 0.6 | 0.005 | 1.122 | 0.005 | 0.065 | 2.461 |
| 77 | 5 | 28 | 19 | 0.005 | 1.745 | 0.005 | 0.8 | 0.005 | 1.119 | 0.005 | 0.059 | 2.440 |
| 77 | 5 | 28 | 20 | 0.005 | 1.752 | 0.005 | 0.9 | 0.005 | 1.110 | 0.005 | 0.049 | 2.440 |
| 77 | 5 | 28 | 21 | 0.005 | 1.784 | 0.005 | 0.8 | 0.005 | 1.120 | 0.005 | 0.048 | 2.441 |
| 77 | 5 | 28 | 22 | 0.005 | 1.777 | 0.005 | 0.6 | 0.005 | 1.129 | 0.005 | 0.052 | 2.441 |
| 77 | 5 | 28 | 23 | 0.005 | 1.765 | 0.005 | 0.5 | 0.005 | 1.131 | 0.005 | 0.056 | 2.442 |
| 77 | 5 | 28 | 24 | 0.005 | 1.776 | 0.005 | 0.5 | 0.005 | 1.137 | 0.005 | 0.053 | 2.442 |
| 77 | 5 | 29 | 1 | 0.005 | 1.775 | 0.005 | 0.5 | 0.005 | 1.138 | 0.005 | 0.053 | 2.443 |
| 77 | 5 | 29 | 2 | 0.005 | 1.785 | 0.005 | 0.5 | 0.005 | 1.141 | 0.005 | 0.056 | 2.443 |
| 77 | 5 | 29 | 3 | 0.005 | 1.787 | 0.005 | 0.5 | 0.005 | 1.141 | 0.005 | 0.059 | 2.443 |
| 77 | 5 | 29 | 4 | 0.005 | 1.784 | 0.005 | 0.5 | 0.005 | 1.143 | 0.005 | 0.057 | 2.443 |
| 77 | 5 | 29 | 5 | 0.005 | 1.796 | 0.005 | 0.5 | 0.005 | 1.146 | 0.005 | 0.056 | 2.444 |
| 77 | 5 | 29 | 6 | 0.005 | 1.797 | 0.005 | 0.5 | 0.005 | 1.139 | 0.005 | 0.055 | 2.444 |
| 77 | 5 | 29 | 7 | 0.005 | 1.763 | 0.005 | 0.5 | 0.005 | 1.122 | 0.005 | 0.055 | 2.443 |
| 77 | 5 | 29 | 8 | 0.005 | 1.727 | 0.005 | 0.5 | 0.005 | 1.103 | 0.005 | 0.053 | 2.442 |
| 77 | 5 | 29 | 9 | 0.005 | 1.701 | 0.005 | 0.6 | 0.005 | 1.078 | 0.005 | 0.060 | 2.177 |
| 77 | 5 | 29 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 29 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 29 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 5 | 30 | 11 | 0.005 | 1.708 | 0.005 | 1.1 | 0.005 | 1.126 | 0.005 | 0.062 | 2.457 |
| 77 | 5 | 30 | 12 | 0.023 | 1.373 | 0.005 | 6.9 | 0.005 | 1.031 | 0.005 | 0.065 | 2.456 |
| 77 | 5 | 30 | 13 | 0.021 | 1.745 | 0.005 | 1.3 | 0.005 | 1.108 | 0.005 | 0.061 | 2.457 |
| 77 | 5 | 30 | 14 | 0.005 | 1.752 | 0.005 | 0.5 | 0.005 | 1.104 | 0.005 | 0.068 | 2.456 |
| 77 | 5 | 30 | 15 | 0.031 | 1.752 | 0.005 | 0.6 | 0.005 | 1.098 | 0.005 | 0.069 | 2.456 |
| 77 | 5 | 30 | 16 | 0.005 | 1.615 | 0.005 | 0.5 | 0.005 | 1.112 | 0.005 | 0.068 | 2.455 |
| 77 | 5 | 30 | 17 | 0.005 | 1.661 | 0.005 | 0.5 | 0.005 | 1.166 | 0.005 | 0.067 | 2.454 |
| 77 | 5 | 30 | 18 | 0.005 | 1.915 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.065 | 2.454 |
| 77 | 5 | 30 | 19 | 0.005 | 1.964 | 0.005 | 0.5 | 0.017 | 1.218 | 0.005 | 0.060 | 2.455 |
| 77 | 5 | 30 | 20 | 0.005 | 2.024 | 0.005 | 0.5 | 0.005 | 1.244 | 0.005 | 0.058 | 2.456 |
| 77 | 5 | 30 | 21 | 0.005 | 2.056 | 0.005 | 0.5 | 0.005 | 1.262 | 0.005 | 0.058 | 2.453 |
| 77 | 5 | 30 | 22 | 0.005 | 2.011 | 0.005 | 0.5 | 0.005 | 1.240 | 0.005 | 0.058 | 2.454 |
| 77 | 5 | 30 | 23 | 0.163 | 1.965 | 0.005 | 0.5 | 0.040 | 1.229 | 0.005 | 0.060 | 2.455 |
| 77 | 5 | 30 | 24 | 0.005 | 2.036 | 0.005 | 0.5 | 0.005 | 1.262 | 0.005 | 0.060 | 2.455 |
| 77 | 5 | 31 | 1 | 0.005 | 1.997 | 0.005 | 0.5 | 0.005 | 1.254 | 0.005 | 0.060 | 2.455 |
| 77 | 5 | 31 | 2 | 0.005 | 2.003 | 0.005 | 0.5 | 0.005 | 1.255 | 0.005 | 0.061 | 2.455 |
| 77 | 5 | 31 | 3 | 0.005 | 1.995 | 0.005 | 0.5 | 0.005 | 1.253 | 0.005 | 0.061 | 2.455 |
| 77 | 5 | 31 | 4 | 0.005 | 2.001 | 0.005 | 0.5 | 0.005 | 1.255 | 0.005 | 0.059 | 2.455 |
| 77 | 5 | 31 | 5 | 0.005 | 2.007 | 0.005 | 0.5 | 0.005 | 1.256 | 0.005 | 0.058 | 2.455 |
| 77 | 5 | 31 | 6 | 0.005 | 2.010 | 0.005 | 0.5 | 0.005 | 1.251 | 0.005 | 0.055 | 2.455 |
| 77 | 5 | 31 | 7 | 0.005 | 2.022 | 0.005 | 0.5 | 0.049 | 1.256 | 0.005 | 0.050 | 2.455 |
| 77 | 5 | 31 | 8 | 0.005 | 2.033 | 0.005 | 0.5 | 0.005 | 1.262 | 0.005 | 0.053 | 2.454 |
| 77 | 5 | 31 | 9 | 0.162 | 1.993 | 0.005 | 1.0 | 0.005 | 1.245 | 0.005 | 0.056 | 2.454 |
| 77 | 5 | 31 | 10 | 0.005 | 0.627 | 0.005 | 0.8 | 0.005 | 0.372 | 0.005 | 0.056 | 2.454 |
| 77 | 5 | 31 | 11 | 0.005 | 0.016 | 0.005 | 0.6 | 0.005 | 0.008 | 0.005 | 0.055 | 2.453 |
| 77 | 5 | 31 | 12 | 0.005 | 0.014 | 0.005 | 0.5 | 0.005 | 0.001 | 0.005 | 0.056 | 2.453 |
| 77 | 5 | 31 | 13 | 0.005 | 0.015 | 0.005 | 0.6 | 0.005 | 0.001 | 0.005 | 0.054 | 2.453 |
| 77 | 5 | 31 | 14 | 0.005 | 0.013 | 0.005 | 1.3 | 0.005 | 0.001 | 0.005 | 0.051 | 2.453 |
| 77 | 5 | 31 | 15 | 0.005 | 1.371 | 0.005 | 1.1 | 0.052 | 0.828 | 0.005 | 0.050 | 2.453 |
| 77 | 5 | 31 | 16 | 0.005 | 1.509 | 0.130 | 1.6 | 0.005 | 1.026 | 0.005 | 0.043 | 2.452 |
| 77 | 5 | 31 | 17 | 0.005 | 1.675 | 0.062 | 0.6 | 0.005 | 1.065 | 0.005 | 0.048 | 2.451 |
| 77 | 5 | 31 | 18 | 0.047 | 1.669 | 0.005 | 0.5 | 0.028 | 1.065 | 0.005 | 0.051 | 2.452 |
| 77 | 5 | 31 | 19 | 0.048 | 1.690 | 0.005 | 0.5 | 0.019 | 1.075 | 0.005 | 0.049 | 2.452 |
| 77 | 5 | 31 | 20 | 0.005 | 1.737 | 0.005 | 0.5 | 0.005 | 1.102 | 0.005 | 0.049 | 2.453 |
| 77 | 5 | 31 | 21 | 0.005 | 1.793 | 0.005 | 0.5 | 0.005 | 1.126 | 0.005 | 0.051 | 2.454 |
| 77 | 5 | 31 | 22 | 0.005 | 1.776 | 0.005 | 0.5 | 0.005 | 1.123 | 0.005 | 0.053 | 2.455 |
| 77 | 5 | 31 | 23 | 0.005 | 1.773 | 0.005 | 0.5 | 0.005 | 1.121 | 0.005 | 0.052 | 2.455 |
| 77 | 5 | 31 | 24 | 0.005 | 1.770 | 0.005 | 0.5 | 0.005 | 1.120 | 0.005 | 0.053 | 2.455 |
| 77 | 6 | 1 | 1 | 0.005 | 1.768 | 0.005 | 0.5 | 0.005 | 1.119 | 0.005 | 0.053 | 2.455 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 1 | 2 | 0.005 | 1.772 | 0.005 | 0.5 | 0.005 | 1.119 | 0.005 | 0.054 | 2.455 |
| 77 | 6 | 1 | 3 | 0.005 | 1.777 | 0.005 | 0.5 | 0.005 | 1.120 | 0.005 | 0.053 | 2.455 |
| 77 | 6 | 1 | 4 | 0.005 | 1.780 | 0.005 | 0.5 | 0.005 | 1.119 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 1 | 5 | 0.005 | 1.788 | 0.005 | 0.5 | 0.005 | 1.123 | 0.005 | 0.049 | 2.455 |
| 77 | 6 | 1 | 6 | 0.005 | 1.767 | 0.005 | 0.6 | 0.005 | 1.111 | 0.005 | 0.043 | 2.455 |
| 77 | 6 | 1 | 7 | 0.005 | 1.783 | 0.005 | 0.7 | 0.005 | 1.110 | 0.005 | 0.043 | 2.455 |
| 77 | 6 | 1 | 8 | 0.005 | 1.764 | 0.005 | 0.7 | 0.005 | 1.105 | 0.005 | 0.046 | 2.455 |
| 77 | 6 | 1 | 9 | 0.005 | 1.733 | 0.005 | 0.5 | 0.005 | 1.090 | 0.005 | 0.049 | 2.454 |
| 77 | 6 | 1 | 10 | 0.005 | 1.696 | 0.005 | 0.6 | 0.005 | 1.073 | 0.005 | 0.052 | 2.454 |
| 77 | 6 | 1 | 11 | 0.005 | 1.686 | 0.005 | 0.6 | 0.005 | 1.069 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 1 | 12 | 0.005 | 1.723 | 0.005 | 0.5 | 0.005 | 1.083 | 0.005 | 0.053 | 2.453 |
| 77 | 6 | 1 | 13 | 0.005 | 1.710 | 0.005 | 0.9 | 0.005 | 1.076 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 1 | 14 | 0.005 | 1.696 | 0.005 | 0.9 | 0.005 | 1.073 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 1 | 15 | 0.005 | 1.684 | 0.005 | 0.8 | 0.005 | 1.062 | 0.005 | 0.052 | 2.452 |
| 77 | 6 | 1 | 16 | 0.005 | 1.676 | 0.005 | 1.0 | 0.005 | 1.063 | 0.005 | 0.053 | 2.453 |
| 77 | 6 | 1 | 17 | 0.005 | 1.684 | 0.005 | 1.0 | 0.005 | 1.068 | 0.005 | 0.054 | 2.453 |
| 77 | 6 | 1 | 18 | 0.005 | 1.688 | 0.005 | 1.2 | 0.005 | 1.065 | 0.005 | 0.054 | 2.453 |
| 77 | 6 | 1 | 19 | 0.005 | 1.689 | 0.005 | 0.8 | 0.005 | 1.071 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 1 | 20 | 0.005 | 1.701 | 0.005 | 0.9 | 0.005 | 1.078 | 0.005 | 0.049 | 2.454 |
| 77 | 6 | 1 | 21 | 0.005 | 1.714 | 0.005 | 1.0 | 0.005 | 1.084 | 0.005 | 0.046 | 2.454 |
| 77 | 6 | 1 | 22 | 0.005 | 1.704 | 0.005 | 0.8 | 0.005 | 1.081 | 0.005 | 0.044 | 2.454 |
| 77 | 6 | 1 | 23 | 0.005 | 1.702 | 0.005 | 0.8 | 0.005 | 1.079 | 0.005 | 0.044 | 2.455 |
| 77 | 6 | 1 | 24 | 0.005 | 1.697 | 0.005 | 1.0 | 0.005 | 1.075 | 0.005 | 0.044 | 2.455 |
| 77 | 6 | 2 | 1 | 0.005 | 1.695 | 0.005 | 1.1 | 0.005 | 1.075 | 0.005 | 0.042 | 2.455 |
| 77 | 6 | 2 | 2 | 0.005 | 1.689 | 0.005 | 1.1 | 0.005 | 1.072 | 0.005 | 0.045 | 2.455 |
| 77 | 6 | 2 | 3 | 0.005 | 1.683 | 0.005 | 1.1 | 0.005 | 1.071 | 0.005 | 0.042 | 2.455 |
| 77 | 6 | 2 | 4 | 0.005 | 1.684 | 0.005 | 1.1 | 0.005 | 1.072 | 0.005 | 0.042 | 2.455 |
| 77 | 6 | 2 | 5 | 0.005 | 1.693 | 0.005 | 1.2 | 0.005 | 1.076 | 0.005 | 0.042 | 2.454 |
| 77 | 6 | 2 | 6 | 0.005 | 1.691 | 0.005 | 0.9 | 0.005 | 1.073 | 0.005 | 0.041 | 2.455 |
| 77 | 6 | 2 | 7 | 0.005 | 1.691 | 0.005 | 0.6 | 0.005 | 1.072 | 0.005 | 0.041 | 2.454 |
| 77 | 6 | 2 | 8 | 0.005 | 1.683 | 0.005 | 0.5 | 0.005 | 1.066 | 0.005 | 0.044 | 2.454 |
| 77 | 6 | 2 | 9 | 0.005 | 1.674 | 0.005 | 0.5 | 0.005 | 1.061 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 2 | 10 | 0.005 | 1.662 | 0.005 | 0.5 | 0.005 | 1.052 | 0.005 | 0.050 | 2.453 |
| 77 | 6 | 2 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 6 | 2 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 6 | 2 | 13 | 0.939 | 0.029 | 0.005 | 0.6 | 0.180 | 0.003 | 0.005 | 0.050 | 2.453 |
| 77 | 6 | 2 | 14 | 0.939 | 0.028 | 0.005 | 0.6 | 0.175 | 0.003 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 2 | 15 | 0.939 | 0.025 | 0.005 | 0.5 | 0.173 | 0.003 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 2 | 16 | 0.939 | 0.922 | 0.005 | 0.5 | 0.203 | 0.607 | 0.005 | 0.048 | 2.453 |
| 77 | 6 | 2 | 17 | 0.939 | 1.165 | 0.005 | 0.5 | 0.210 | 1.029 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 2 | 18 | 0.939 | 1.555 | 0.005 | 0.5 | 0.210 | 1.064 | 0.005 | 0.045 | 2.453 |
| 77 | 6 | 2 | 19 | 0.939 | 1.758 | 0.005 | 0.5 | 0.210 | 1.116 | 0.005 | 0.046 | 2.454 |
| 77 | 6 | 2 | 20 | 0.939 | 1.774 | 0.005 | 0.6 | 0.210 | 1.123 | 0.005 | 0.044 | 2.454 |
| 77 | 6 | 2 | 21 | 0.939 | 1.758 | 0.005 | 1.1 | 0.213 | 1.106 | 0.005 | 0.041 | 2.454 |
| 77 | 6 | 2 | 22 | 0.939 | 1.769 | 0.005 | 0.9 | 0.221 | 1.114 | 0.005 | 0.041 | 2.454 |
| 77 | 6 | 2 | 23 | 0.939 | 1.756 | 0.005 | 1.0 | 0.221 | 1.108 | 0.005 | 0.042 | 2.453 |
| 77 | 6 | 2 | 24 | 0.939 | 1.758 | 0.005 | 1.1 | 0.221 | 1.106 | 0.005 | 0.042 | 2.453 |
| 77 | 6 | 3 | 1 | 0.940 | 1.757 | 0.005 | 0.9 | 0.221 | 1.107 | 0.005 | 0.041 | 2.453 |
| 77 | 6 | 3 | 2 | 0.940 | 1.773 | 0.005 | 0.7 | 0.221 | 1.113 | 0.005 | 0.039 | 2.454 |
| 77 | 6 | 3 | 3 | 0.940 | 1.792 | 0.005 | 0.7 | 0.221 | 1.121 | 0.005 | 0.040 | 2.454 |
| 77 | 6 | 3 | 4 | 0.940 | 1.788 | 0.005 | 1.0 | 0.221 | 1.124 | 0.005 | 0.042 | 2.454 |
| 77 | 6 | 3 | 5 | 0.940 | 1.783 | 0.005 | 1.0 | 0.221 | 1.121 | 0.005 | 0.041 | 2.454 |
| 77 | 6 | 3 | 6 | 0.800 | 1.790 | 0.005 | 0.7 | 0.221 | 1.120 | 0.005 | 0.039 | 2.454 |
| 77 | 6 | 3 | 7 | 0.326 | 1.782 | 0.005 | 0.5 | 0.221 | 1.117 | 0.005 | 0.042 | 2.454 |
| 77 | 6 | 3 | 8 | 0.356 | 1.816 | 0.005 | 0.8 | 0.188 | 1.139 | 0.005 | 0.044 | 2.454 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 3 | 9 | 0.207 | 1.786 | 0.005 | 0.6 | 0.005 | 1.122 | 0.005 | 0.045 | 2.454 |
| 77 | 6 | 3 | 10 | 0.166 | 1.753 | 0.005 | 0.6 | 0.005 | 1.104 | 0.005 | 0.049 | 2.453 |
| 77 | 6 | 3 | 11 | 0.341 | 1.742 | 0.005 | 0.9 | 0.005 | 1.100 | 0.005 | 0.048 | 2.453 |
| 77 | 6 | 3 | 12 | 0.387 | 1.738 | 0.005 | 0.8 | 0.005 | 1.097 | 0.005 | 0.049 | 2.453 |
| 77 | 6 | 3 | 13 | 0.403 | 1.729 | 0.005 | 0.7 | 0.005 | 1.086 | 0.005 | 0.050 | 2.452 |
| 77 | 6 | 3 | 14 | 0.472 | 1.716 | 0.005 | 0.8 | 0.005 | 1.085 | 0.005 | 0.049 | 2.452 |
| 77 | 6 | 3 | 15 | 0.620 | 1.717 | 0.005 | 0.7 | 0.005 | 1.085 | 0.005 | 0.050 | 2.452 |
| 77 | 6 | 3 | 16 | 0.327 | 1.717 | 0.005 | 0.6 | 0.016 | 1.085 | 0.005 | 0.051 | 2.452 |
| 77 | 6 | 3 | 17 | 0.005 | 1.697 | 0.005 | 0.8 | 0.005 | 1.078 | 0.005 | 0.051 | 2.452 |
| 77 | 6 | 3 | 18 | 0.005 | 1.704 | 0.005 | 1.1 | 0.005 | 1.081 | 0.005 | 0.050 | 2.452 |
| 77 | 6 | 3 | 19 | 0.010 | 1.718 | 0.005 | 1.1 | 0.011 | 1.090 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 3 | 20 | 0.011 | 1.751 | 0.005 | 0.8 | 0.012 | 1.111 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 3 | 21 | 0.005 | 1.770 | 0.005 | 1.0 | 0.005 | 1.119 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 3 | 22 | 0.005 | 1.774 | 0.005 | 1.1 | 0.005 | 1.122 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 3 | 23 | 0.005 | 1.783 | 0.005 | 1.0 | 0.005 | 1.126 | 0.005 | 0.049 | 2.454 |
| 77 | 6 | 3 | 24 | 0.005 | 1.786 | 0.005 | 1.0 | 0.005 | 1.127 | 0.005 | 0.048 | 2.454 |
| 77 | 6 | 4 | 1 | 0.005 | 1.790 | 0.005 | 0.9 | 0.005 | 1.129 | 0.005 | 0.045 | 2.454 |
| 77 | 6 | 4 | 2 | 0.005 | 1.791 | 0.005 | 0.9 | 0.005 | 1.130 | 0.005 | 0.044 | 2.455 |
| 77 | 6 | 4 | 3 | 0.005 | 1.809 | 0.005 | 0.7 | 0.005 | 1.135 | 0.005 | 0.047 | 2.455 |
| 77 | 6 | 4 | 4 | 0.005 | 1.810 | 0.005 | 0.7 | 0.005 | 1.135 | 0.005 | 0.047 | 2.455 |
| 77 | 6 | 4 | 5 | 0.005 | 1.810 | 0.005 | 0.6 | 0.005 | 1.137 | 0.005 | 0.048 | 2.455 |
| 77 | 6 | 4 | 6 | 0.005 | 1.808 | 0.005 | 0.6 | 0.005 | 1.135 | 0.005 | 0.044 | 2.455 |
| 77 | 6 | 4 | 7 | 0.005 | 1.886 | 0.005 | 1.7 | 0.005 | 1.121 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 4 | 8 | 0.005 | 1.755 | 0.005 | 0.6 | 0.005 | 1.107 | 0.005 | 0.049 | 2.454 |
| 77 | 6 | 4 | 9 | 0.005 | 1.729 | 0.005 | 0.6 | 0.005 | 1.095 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 4 | 10 | 0.005 | 1.698 | 0.005 | 0.5 | 0.005 | 1.076 | 0.005 | 0.054 | 2.452 |
| 77 | 6 | 4 | 11 | 0.005 | 1.675 | 0.005 | 0.5 | 0.005 | 1.060 | 0.005 | 0.055 | 2.452 |
| 77 | 6 | 4 | 12 | 0.005 | 1.661 | 0.005 | 0.6 | 0.005 | 1.051 | 0.005 | 0.054 | 2.452 |
| 77 | 6 | 4 | 13 | 0.005 | 1.653 | 0.005 | 0.6 | 0.005 | 1.050 | 0.005 | 0.054 | 2.455 |
| 77 | 6 | 4 | 14 | 0.005 | 1.657 | 0.005 | 0.6 | 0.005 | 1.049 | 0.005 | 0.054 | 2.456 |
| 77 | 6 | 4 | 15 | 0.005 | 1.641 | 0.005 | 0.5 | 0.005 | 1.052 | 0.005 | 0.055 | 2.453 |
| 77 | 6 | 4 | 16 | 0.005 | 1.676 | 0.005 | 0.5 | 0.005 | 1.058 | 0.005 | 0.055 | 2.454 |
| 77 | 6 | 4 | 17 | 0.005 | 1.711 | 0.005 | 0.5 | 0.005 | 1.051 | 0.005 | 0.056 | 2.454 |
| 77 | 6 | 4 | 18 | 0.005 | 1.681 | 0.005 | 0.5 | 0.005 | 1.061 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 4 | 19 | 0.005 | 1.680 | 0.005 | 0.5 | 0.005 | 1.066 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 4 | 20 | 0.005 | 1.705 | 0.005 | 0.5 | 0.005 | 1.079 | 0.005 | 0.048 | 2.455 |
| 77 | 6 | 4 | 21 | 0.005 | 1.743 | 0.005 | 0.5 | 0.005 | 1.100 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 4 | 22 | 0.005 | 1.762 | 0.005 | 0.5 | 0.005 | 1.113 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 4 | 23 | 0.005 | 1.779 | 0.005 | 0.6 | 0.005 | 1.121 | 0.005 | 0.049 | 2.456 |
| 77 | 6 | 4 | 24 | 0.005 | 1.793 | 0.005 | 0.6 | 0.005 | 1.128 | 0.005 | 0.047 | 2.457 |
| 77 | 6 | 5 | 1 | 0.005 | 1.802 | 0.005 | 0.6 | 0.005 | 1.136 | 0.005 | 0.046 | 2.456 |
| 77 | 6 | 5 | 2 | 0.005 | 1.824 | 0.005 | 0.5 | 0.005 | 1.147 | 0.005 | 0.047 | 2.457 |
| 77 | 6 | 5 | 3 | 0.005 | 1.806 | 0.005 | 0.6 | 0.005 | 1.136 | 0.005 | 0.050 | 2.457 |
| 77 | 6 | 5 | 4 | 0.005 | 1.803 | 0.005 | 0.5 | 0.005 | 1.135 | 0.005 | 0.050 | 2.457 |
| 77 | 6 | 5 | 5 | 0.005 | 1.822 | 0.005 | 0.5 | 0.005 | 1.146 | 0.005 | 0.049 | 2.457 |
| 77 | 6 | 5 | 6 | 0.005 | 1.833 | 0.005 | 0.5 | 0.005 | 1.142 | 0.005 | 0.046 | 2.457 |
| 77 | 6 | 5 | 7 | 0.005 | 1.803 | 0.005 | 0.5 | 0.005 | 1.133 | 0.005 | 0.047 | 2.456 |
| 77 | 6 | 5 | 8 | 0.005 | 1.776 | 0.005 | 0.5 | 0.005 | 1.114 | 0.005 | 0.049 | 2.456 |
| 77 | 6 | 5 | 9 | 0.005 | 1.730 | 0.005 | 0.5 | 0.005 | 1.090 | 0.005 | 0.053 | 2.455 |
| 77 | 6 | 5 | 10 | 0.005 | 1.697 | 0.005 | 0.5 | 0.005 | 1.069 | 0.005 | 0.055 | 2.454 |
| 77 | 6 | 5 | 11 | 0.005 | 1.670 | 0.005 | 0.5 | 0.005 | 1.056 | 0.005 | 0.055 | 2.453 |
| 77 | 6 | 5 | 12 | 0.005 | 1.670 | 0.005 | 0.5 | 0.005 | 1.052 | 0.005 | 0.056 | 2.453 |
| 77 | 6 | 5 | 13 | 0.005 | 1.677 | 0.005 | 0.5 | 0.005 | 1.055 | 0.005 | 0.055 | 2.453 |
| 77 | 6 | 5 | 14 | 0.005 | 1.666 | 0.005 | 0.5 | 0.005 | 1.058 | 0.005 | 0.055 | 2.452 |
| 77 | 6 | 5 | 15 | 0.005 | 1.660 | 0.005 | 0.5 | 0.005 | 1.065 | 0.005 | 0.056 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 5 | 16 | 0.005 | 1.637 | 0.005 | 0.5 | 0.005 | 1.037 | 0.005 | 0.055 | 2.451 |
| 77 | 6 | 5 | 17 | 0.005 | 1.641 | 0.005 | 0.5 | 0.005 | 1.046 | 0.005 | 0.054 | 2.451 |
| 77 | 6 | 5 | 18 | 0.005 | 1.690 | 0.005 | 0.7 | 0.005 | 1.068 | 0.005 | 0.056 | 2.452 |
| 77 | 6 | 5 | 19 | 0.005 | 1.721 | 0.005 | 0.9 | 0.005 | 1.088 | 0.005 | 0.054 | 2.453 |
| 77 | 6 | 5 | 20 | 0.005 | 1.747 | 0.005 | 0.9 | 0.005 | 1.104 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 5 | 21 | 0.005 | 1.779 | 0.005 | 1.0 | 0.005 | 1.111 | 0.005 | 0.048 | 2.455 |
| 77 | 6 | 5 | 22 | 0.005 | 1.776 | 0.005 | 0.9 | 0.005 | 1.118 | 0.005 | 0.046 | 2.456 |
| 77 | 6 | 5 | 23 | 0.005 | 1.793 | 0.005 | 0.9 | 0.005 | 1.126 | 0.005 | 0.046 | 2.456 |
| 77 | 6 | 5 | 24 | 0.005 | 1.809 | 0.005 | 0.5 | 0.005 | 1.132 | 0.005 | 0.045 | 2.457 |
| 77 | 6 | 6 | 1 | 0.005 | 1.821 | 0.005 | 0.5 | 0.005 | 1.134 | 0.005 | 0.047 | 2.457 |
| 77 | 6 | 6 | 2 | 0.005 | 1.822 | 0.005 | 0.5 | 0.005 | 1.137 | 0.005 | 0.049 | 2.457 |
| 77 | 6 | 6 | 3 | 0.005 | 1.833 | 0.005 | 0.5 | 0.005 | 1.150 | 0.005 | 0.050 | 2.457 |
| 77 | 6 | 6 | 4 | 0.005 | 1.826 | 0.005 | 0.5 | 0.005 | 1.148 | 0.005 | 0.050 | 2.457 |
| 77 | 6 | 6 | 5 | 0.005 | 1.850 | 0.005 | 0.5 | 0.005 | 1.155 | 0.005 | 0.051 | 2.457 |
| 77 | 6 | 6 | 6 | 0.005 | 1.840 | 0.005 | 0.5 | 0.005 | 1.136 | 0.005 | 0.048 | 2.457 |
| 77 | 6 | 6 | 7 | 0.005 | 1.803 | 0.005 | 0.5 | 0.005 | 1.130 | 0.005 | 0.049 | 2.457 |
| 77 | 6 | 6 | 8 | 0.005 | 1.792 | 0.005 | 0.5 | 0.005 | 1.123 | 0.005 | 0.048 | 2.456 |
| 77 | 6 | 6 | 9 | 0.005 | 1.767 | 0.005 | 0.5 | 0.005 | 1.108 | 0.005 | 0.049 | 2.456 |
| 77 | 6 | 6 | 10 | 0.005 | 1.716 | 0.005 | 0.5 | 0.005 | 1.082 | 0.005 | 0.051 | 2.455 |
| 77 | 6 | 6 | 11 | 0.005 | 1.712 | 0.005 | 0.5 | 0.005 | 1.076 | 0.005 | 0.051 | 2.454 |
| 77 | 6 | 6 | 12 | 0.005 | 1.699 | 0.005 | 0.5 | 0.005 | 1.072 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 6 | 13 | 0.005 | 1.687 | 0.005 | 0.5 | 0.005 | 1.064 | 0.005 | 0.051 | 2.454 |
| 77 | 6 | 6 | 14 | 0.005 | 1.608 | 0.005 | 0.5 | 0.005 | 1.048 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 6 | 15 | 0.005 | 1.450 | 0.005 | 3.2 | 0.005 | 0.983 | 0.005 | 0.048 | 2.453 |
| 77 | 6 | 6 | 16 | 0.262 | 1.690 | 0.049 | 0.5 | 0.005 | 1.070 | 0.005 | 0.050 | 2.453 |
| 77 | 6 | 6 | 17 | 0.005 | 1.713 | 0.005 | 0.5 | 0.005 | 1.077 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 6 | 18 | 0.005 | 1.717 | 0.005 | 0.5 | 0.005 | 1.083 | 0.005 | 0.048 | 2.454 |
| 77 | 6 | 6 | 19 | 0.005 | 1.728 | 0.005 | 0.5 | 0.005 | 1.089 | 0.005 | 0.043 | 2.455 |
| 77 | 6 | 6 | 20 | 0.005 | 1.741 | 0.005 | 0.5 | 0.005 | 1.099 | 0.005 | 0.043 | 2.456 |
| 77 | 6 | 6 | 21 | 0.005 | 1.763 | 0.005 | 0.5 | 0.005 | 1.108 | 0.005 | 0.043 | 2.456 |
| 77 | 6 | 6 | 22 | 0.005 | 1.760 | 0.005 | 0.5 | 0.005 | 1.109 | 0.005 | 0.041 | 2.456 |
| 77 | 6 | 6 | 23 | 0.005 | 1.763 | 0.005 | 0.5 | 0.005 | 1.111 | 0.005 | 0.042 | 2.457 |
| 77 | 6 | 6 | 24 | 0.005 | 1.762 | 0.005 | 0.5 | 0.005 | 1.111 | 0.005 | 0.043 | 2.457 |
| 77 | 6 | 7 | 1 | 0.005 | 1.764 | 0.005 | 0.5 | 0.005 | 1.110 | 0.005 | 0.045 | 2.457 |
| 77 | 6 | 7 | 2 | 0.005 | 1.771 | 0.005 | 0.5 | 0.005 | 1.114 | 0.005 | 0.044 | 2.457 |
| 77 | 6 | 7 | 3 | 0.005 | 1.790 | 0.005 | 0.5 | 0.005 | 1.126 | 0.005 | 0.042 | 2.457 |
| 77 | 6 | 7 | 4 | 0.005 | 1.778 | 0.005 | 0.5 | 0.005 | 1.121 | 0.005 | 0.041 | 2.457 |
| 77 | 6 | 7 | 5 | 0.005 | 1.780 | 0.005 | 0.5 | 0.005 | 1.122 | 0.005 | 0.042 | 2.457 |
| 77 | 6 | 7 | 6 | 0.005 | 1.781 | 0.005 | 0.5 | 0.005 | 1.119 | 0.005 | 0.042 | 2.457 |
| 77 | 6 | 7 | 7 | 0.005 | 1.765 | 0.005 | 0.5 | 0.005 | 1.107 | 0.005 | 0.046 | 2.457 |
| 77 | 6 | 7 | 8 | 0.005 | 1.733 | 0.005 | 0.5 | 0.005 | 1.093 | 0.005 | 0.048 | 2.456 |
| 77 | 6 | 7 | 9 | 0.005 | 1.709 | 0.005 | 0.5 | 0.005 | 1.079 | 0.005 | 0.050 | 2.455 |
| 77 | 6 | 7 | 10 | 0.005 | 1.694 | 0.005 | 0.5 | 0.005 | 1.069 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 7 | 11 | 0.005 | 1.687 | 0.005 | 0.5 | 0.005 | 1.060 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 7 | 12 | 0.005 | 1.689 | 0.005 | 0.5 | 0.005 | 1.072 | 0.005 | 0.054 | 2.454 |
| 77 | 6 | 7 | 13 | 0.005 | 1.677 | 0.005 | 0.5 | 0.005 | 1.048 | 0.005 | 0.054 | 2.454 |
| 77 | 6 | 7 | 14 | 0.005 | 1.667 | 0.005 | 0.5 | 0.005 | 1.056 | 0.005 | 0.052 | 2.454 |
| 77 | 6 | 7 | 15 | 0.005 | 1.674 | 0.005 | 0.5 | 0.017 | 1.052 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 7 | 16 | 0.005 | 1.685 | 0.005 | 0.5 | 0.005 | 1.059 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 7 | 17 | 0.005 | 1.690 | 0.005 | 0.5 | 0.005 | 1.068 | 0.005 | 0.054 | 2.456 |
| 77 | 6 | 7 | 18 | 0.005 | 1.696 | 0.005 | 0.5 | 0.005 | 1.070 | 0.005 | 0.054 | 2.456 |
| 77 | 6 | 7 | 19 | 0.005 | 1.685 | 0.005 | 0.5 | 0.005 | 1.063 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 7 | 20 | 0.005 | 1.694 | 0.005 | 0.5 | 0.005 | 1.066 | 0.005 | 0.047 | 2.456 |
| 77 | 6 | 7 | 21 | 0.005 | 1.727 | 0.005 | 0.5 | 0.005 | 1.086 | 0.005 | 0.046 | 2.456 |
| 77 | 6 | 7 | 22 | 0.005 | 1.756 | 0.005 | 0.5 | 0.005 | 1.099 | 0.005 | 0.046 | 2.457 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 7 | 23 | 0.005 | 1.750 | 0.005 | 0.5 | 0.005 | 1.102 | 0.005 | 0.044 | 2.457 |
| 77 | 6 | 7 | 24 | 0.005 | 1.741 | 0.005 | 0.5 | 0.005 | 1.096 | 0.005 | 0.046 | 2.457 |
| 77 | 6 | 8 | 1 | 0.005 | 1.720 | 0.005 | 0.5 | 0.005 | 1.084 | 0.005 | 0.049 | 2.456 |
| 77 | 6 | 8 | 2 | 0.005 | 1.716 | 0.005 | 0.5 | 0.005 | 1.080 | 0.005 | 0.042 | 2.455 |
| 77 | 6 | 8 | 3 | 0.005 | 1.713 | 0.005 | 0.5 | 0.005 | 1.080 | 0.005 | 0.043 | 2.455 |
| 77 | 6 | 8 | 4 | 0.005 | 1.720 | 0.005 | 0.5 | 0.005 | 1.077 | 0.005 | 0.043 | 2.455 |
| 77 | 6 | 8 | 5 | 0.005 | 1.727 | 0.005 | 0.5 | 0.005 | 1.083 | 0.005 | 0.047 | 2.455 |
| 77 | 6 | 8 | 6 | 0.005 | 1.698 | 0.005 | 0.5 | 0.005 | 1.066 | 0.005 | 0.048 | 2.455 |
| 77 | 6 | 8 | 7 | 0.005 | 1.672 | 0.005 | 0.5 | 0.005 | 1.049 | 0.005 | 0.049 | 2.454 |
| 77 | 6 | 8 | 8 | 0.005 | 1.640 | 0.005 | 0.5 | 0.005 | 1.029 | 0.005 | 0.054 | 2.452 |
| 77 | 6 | 8 | 9 | 0.005 | 1.622 | 0.005 | 0.5 | 0.005 | 0.970 | 0.005 | 0.055 | 2.448 |
| 77 | 6 | 8 | 10 | 0.005 | 1.657 | 0.005 | 0.5 | 0.005 | 1.049 | 0.005 | 0.055 | 2.448 |
| 77 | 6 | 8 | 11 | 0.005 | 1.680 | 0.005 | 0.5 | 0.005 | 1.055 | 0.005 | 0.054 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 10 | 10 | 0.005 | 1.183 | 0.005 | 0.5 | 0.005 | 0.796 | 0.005 | 0.052 | 2.447 |
| 77 | 6 | 10 | 11 | 0.005 | 1.400 | 0.005 | 0.5 | 0.005 | 0.968 | 0.005 | 0.052 | 2.447 |
| 77 | 6 | 10 | 12 | 0.005 | 1.410 | 0.005 | 0.5 | 0.005 | 0.926 | 0.005 | 0.053 | 2.446 |
| 77 | 6 | 10 | 13 | 0.005 | 1.432 | 0.005 | 0.5 | 0.005 | 0.940 | 0.005 | 0.053 | 2.446 |
| 77 | 6 | 10 | 14 | 0.005 | 1.433 | 0.005 | 0.5 | 0.005 | 0.943 | 0.005 | 0.051 | 2.447 |
| 77 | 6 | 10 | 15 | 0.005 | 1.452 | 0.005 | 0.5 | 0.005 | 0.922 | 0.005 | 0.050 | 2.448 |
| 77 | 6 | 10 | 16 | 0.005 | 1.432 | 0.005 | 0.5 | 0.005 | 0.917 | 0.005 | 0.049 | 2.447 |
| 77 | 6 | 10 | 17 | 0.005 | 1.416 | 0.005 | 0.5 | 0.005 | 0.913 | 0.005 | 0.050 | 2.447 |
| 77 | 6 | 10 | 18 | 0.041 | 1.349 | 0.005 | 0.5 | 0.005 | 0.910 | 0.005 | 0.051 | 2.448 |
| 77 | 6 | 10 | 19 | 0.204 | 0.299 | 0.005 | 0.5 | 0.005 | 0.269 | 0.005 | 0.050 | 2.448 |
| 77 | 6 | 10 | 20 | 0.321 | 0.931 | 0.005 | 0.5 | 0.005 | 0.832 | 0.005 | 0.049 | 2.448 |
| 77 | 6 | 10 | 21 | 0.311 | 1.292 | 0.005 | 0.5 | 0.005 | 1.238 | 0.005 | 0.049 | 2.448 |
| 77 | 6 | 10 | 22 | 0.334 | 1.240 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.050 | 2.448 |
| 77 | 6 | 10 | 23 | 0.088 | 1.479 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.050 | 2.448 |
| 77 | 6 | 10 | 24 | 0.005 | 1.685 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.051 | 2.448 |
| 77 | 6 | 11 | 1 | 0.005 | 1.898 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.047 | 2.448 |
| 77 | 6 | 11 | 2 | 0.005 | 1.932 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.048 | 2.448 |
| 77 | 6 | 11 | 3 | 0.005 | 1.933 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.048 | 2.448 |
| 77 | 6 | 11 | 4 | 0.005 | 1.943 | 0.005 | 0.5 | 0.005 | 1.223 | 0.005 | 0.049 | 2.448 |
| 77 | 6 | 11 | 5 | 0.005 | 1.933 | 0.005 | 0.5 | 0.005 | 1.222 | 0.005 | 0.050 | 2.448 |
| 77 | 6 | 11 | 6 | 0.005 | 1.927 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.047 | 2.448 |
| 77 | 6 | 11 | 7 | 0.005 | 1.904 | 0.005 | 0.5 | 0.005 | 1.196 | 0.005 | 0.045 | 2.448 |
| 77 | 6 | 11 | 8 | 0.005 | 1.853 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.051 | 2.447 |
| 77 | 6 | 11 | 9 | 0.005 | 1.859 | 0.005 | 0.5 | 0.005 | 1.177 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 11 | 10 | 0.005 | 1.912 | 0.005 | 0.5 | 0.005 | 1.207 | 0.005 | 0.053 | 2.452 |
| 77 | 6 | 11 | 11 | 0.005 | 1.924 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.051 | 2.451 |
| 77 | 6 | 11 | 12 | 0.005 | 1.930 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.052 | 2.451 |
| 77 | 6 | 11 | 13 | 0.005 | 1.932 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.054 | 2.451 |
| 77 | 6 | 11 | 14 | 0.005 | 1.916 | 0.005 | 0.5 | 0.005 | 1.208 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 11 | 15 | 0.005 | 1.901 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.048 | 2.451 |
| 77 | 6 | 11 | 16 | 0.005 | 1.898 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.048 | 2.450 |
| 77 | 6 | 11 | 17 | 0.005 | 1.914 | 0.005 | 0.5 | 0.005 | 1.208 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 11 | 18 | 0.005 | 1.923 | 0.005 | 0.5 | 0.005 | 1.212 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 11 | 19 | 0.005 | 1.946 | 0.005 | 0.5 | 0.005 | 1.224 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 11 | 20 | 0.005 | 1.966 | 0.005 | 0.5 | 0.005 | 1.235 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 11 | 21 | 0.005 | 1.983 | 0.005 | 0.5 | 0.005 | 1.251 | 0.005 | 0.049 | 2.452 |
| 77 | 6 | 11 | 22 | 0.005 | 2.009 | 0.005 | 0.5 | 0.005 | 1.263 | 0.005 | 0.060 | 2.453 |
| 77 | 6 | 11 | 23 | 0.005 | 2.012 | 0.005 | 0.5 | 0.005 | 1.265 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 11 | 24 | 0.005 | 2.002 | 0.005 | 0.5 | 0.005 | 1.263 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 12 | 1 | 0.005 | 2.009 | 0.005 | 0.5 | 0.005 | 1.263 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 12 | 2 | 0.005 | 2.014 | 0.005 | 0.5 | 0.005 | 1.266 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 12 | 3 | 0.005 | 2.018 | 0.005 | 0.5 | 0.005 | 1.267 | 0.005 | 0.061 | 2.453 |
| 77 | 6 | 12 | 4 | 0.005 | 2.019 | 0.005 | 0.5 | 0.005 | 1.269 | 0.005 | 0.058 | 2.453 |
| 77 | 6 | 12 | 5 | 0.005 | 2.025 | 0.005 | 0.5 | 0.005 | 1.274 | 0.005 | 0.058 | 2.453 |
| 77 | 6 | 12 | 6 | 0.005 | 2.019 | 0.005 | 0.5 | 0.005 | 1.269 | 0.005 | 0.056 | 2.453 |
| 77 | 6 | 12 | 7 | 0.005 | 2.008 | 0.005 | 0.5 | 0.005 | 1.254 | 0.005 | 0.056 | 2.453 |
| 77 | 6 | 12 | 8 | 0.005 | 1.974 | 0.005 | 0.5 | 0.005 | 1.237 | 0.005 | 0.056 | 2.454 |
| 77 | 6 | 12 | 9 | 0.005 | 1.942 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.060 | 2.452 |
| 77 | 6 | 12 | 10 | 0.005 | 1.910 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.064 | 2.452 |
| 77 | 6 | 12 | 11 | 0.005 | 1.902 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.062 | 2.452 |
| 77 | 6 | 12 | 12 | 0.005 | 1.896 | 0.005 | 0.5 | 0.005 | 1.196 | 0.005 | 0.061 | 2.452 |
| 77 | 6 | 12 | 13 | 0.005 | 1.895 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.061 | 2.452 |
| 77 | 6 | 12 | 14 | 0.005 | 1.897 | 0.005 | 0.5 | 0.005 | 1.195 | 0.005 | 0.062 | 2.451 |
| 77 | 6 | 12 | 15 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.193 | 0.005 | 0.062 | 2.451 |
| 77 | 6 | 12 | 16 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.063 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 12 | 17 | 0.005 | 1.905 | 0.005 | 0.5 | 0.005 | 1.201 | 0.005 | 0.063 | 2.451 |
| 77 | 6 | 12 | 18 | 0.005 | 1.930 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.062 | 2.451 |
| 77 | 6 | 12 | 19 | 0.005 | 1.961 | 0.005 | 0.5 | 0.005 | 1.237 | 0.005 | 0.060 | 2.452 |
| 77 | 6 | 12 | 20 | 0.005 | 1.992 | 0.005 | 0.5 | 0.005 | 1.256 | 0.005 | 0.056 | 2.453 |
| 77 | 6 | 12 | 21 | 0.005 | 2.007 | 0.005 | 0.5 | 0.005 | 1.264 | 0.005 | 0.055 | 2.453 |
| 77 | 6 | 12 | 22 | 0.005 | 2.020 | 0.005 | 0.5 | 0.005 | 1.271 | 0.005 | 0.056 | 2.453 |
| 77 | 6 | 12 | 23 | 0.005 | 2.018 | 0.005 | 0.5 | 0.005 | 1.269 | 0.005 | 0.058 | 2.454 |
| 77 | 6 | 12 | 24 | 0.005 | 2.015 | 0.005 | 0.5 | 0.005 | 1.270 | 0.005 | 0.059 | 2.454 |
| 77 | 6 | 13 | 1 | 0.005 | 2.014 | 0.005 | 0.5 | 0.005 | 1.270 | 0.005 | 0.058 | 2.454 |
| 77 | 6 | 13 | 2 | 0.005 | 2.016 | 0.005 | 0.5 | 0.005 | 1.273 | 0.005 | 0.058 | 2.454 |
| 77 | 6 | 13 | 3 | 0.005 | 2.012 | 0.005 | 0.5 | 0.005 | 1.268 | 0.005 | 0.059 | 2.454 |
| 77 | 6 | 13 | 4 | 0.005 | 2.014 | 0.005 | 0.5 | 0.005 | 1.269 | 0.005 | 0.056 | 2.454 |
| 77 | 6 | 13 | 5 | 0.005 | 2.036 | 0.005 | 0.5 | 0.005 | 1.280 | 0.005 | 0.054 | 2.454 |
| 77 | 6 | 13 | 6 | 0.005 | 2.033 | 0.005 | 0.5 | 0.005 | 1.270 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 13 | 7 | 0.005 | 2.015 | 0.005 | 0.5 | 0.005 | 1.259 | 0.005 | 0.057 | 2.454 |
| 77 | 6 | 13 | 8 | 0.005 | 1.995 | 0.005 | 0.5 | 0.005 | 1.236 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 13 | 9 | 0.005 | 1.903 | 0.005 | 0.5 | 0.005 | 1.219 | 0.005 | 0.061 | 2.457 |
| 77 | 6 | 13 | 10 | 0.005 | 1.589 | 0.005 | 0.5 | 0.005 | 1.050 | 0.005 | 0.056 | 2.457 |
| 77 | 6 | 13 | 11 | 0.005 | 1.884 | 0.005 | 20.8 | 0.005 | 1.191 | 0.005 | 0.062 | 2.456 |
| 77 | 6 | 13 | 12 | 0.005 | 1.867 | 0.005 | 46.3 | 0.005 | 1.179 | 0.005 | 0.062 | 2.453 |
| 77 | 6 | 13 | 13 | 0.005 | 1.850 | 0.005 | 37.2 | 0.005 | 1.169 | 0.005 | 0.060 | 2.451 |
| 77 | 6 | 13 | 14 | 0.005 | 1.855 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.060 | 2.451 |
| 77 | 6 | 13 | 15 | 0.005 | 1.847 | 0.005 | 0.5 | 0.005 | 1.169 | 0.005 | 0.059 | 2.451 |
| 77 | 6 | 13 | 16 | 0.005 | 1.845 | 0.005 | 27.5 | 0.005 | 1.168 | 0.005 | 0.061 | 2.451 |
| 77 | 6 | 13 | 17 | 0.005 | 1.839 | 0.005 | 30.2 | 0.005 | 1.164 | 0.005 | 0.061 | 2.451 |
| 77 | 6 | 13 | 18 | 0.005 | 1.868 | 0.005 | 37.5 | 0.005 | 1.180 | 0.005 | 0.061 | 2.451 |
| 77 | 6 | 13 | 19 | 0.005 | 1.884 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.059 | 2.451 |
| 77 | 6 | 13 | 20 | 0.005 | 1.945 | 0.005 | 0.5 | 0.005 | 1.227 | 0.005 | 0.060 | 2.452 |
| 77 | 6 | 13 | 21 | 0.005 | 1.979 | 0.005 | 0.5 | 0.005 | 1.247 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 13 | 22 | 0.005 | 1.979 | 0.005 | 2.3 | 0.005 | 1.246 | 0.005 | 0.061 | 2.454 |
| 77 | 6 | 13 | 23 | 0.005 | 1.939 | 0.005 | 0.5 | 0.005 | 1.223 | 0.005 | 0.059 | 2.453 |
| 77 | 6 | 13 | 24 | 0.005 | 1.918 | 0.005 | 0.5 | 0.005 | 1.211 | 0.005 | 0.062 | 2.453 |
| 77 | 6 | 14 | 1 | 0.005 | 1.924 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.065 | 2.453 |
| 77 | 6 | 14 | 2 | 0.005 | 1.930 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.065 | 2.453 |
| 77 | 6 | 14 | 3 | 0.005 | 1.926 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.065 | 2.453 |
| 77 | 6 | 14 | 4 | 0.005 | 1.937 | 0.005 | 0.5 | 0.005 | 1.223 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 14 | 5 | 0.005 | 1.941 | 0.005 | 0.5 | 0.005 | 1.227 | 0.005 | 0.062 | 2.453 |
| 77 | 6 | 14 | 6 | 0.005 | 1.962 | 0.005 | 0.5 | 0.005 | 1.231 | 0.005 | 0.061 | 2.453 |
| 77 | 6 | 14 | 7 | 0.005 | 2.001 | 0.005 | 0.5 | 0.005 | 1.249 | 0.005 | 0.062 | 2.453 |
| 77 | 6 | 14 | 8 | 0.005 | 1.970 | 0.005 | 0.9 | 0.005 | 1.243 | 0.005 | 0.065 | 2.453 |
| 77 | 6 | 14 | 9 | 0.005 | 1.929 | 0.005 | 13.0 | 0.005 | 1.216 | 0.005 | 0.066 | 2.452 |
| 77 | 6 | 14 | 10 | 0.005 | 1.899 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.065 | 2.452 |
| 77 | 6 | 14 | 11 | 0.005 | 1.888 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.064 | 2.452 |
| 77 | 6 | 14 | 12 | 0.005 | 1.869 | 0.005 | 13.7 | 0.005 | 1.180 | 0.005 | 0.058 | 2.451 |
| 77 | 6 | 14 | 13 | 0.005 | 1.849 | 0.005 | 24.2 | 0.005 | 1.168 | 0.005 | 0.053 | 2.451 |
| 77 | 6 | 14 | 14 | 0.005 | 1.826 | 0.005 | 25.4 | 0.005 | 1.155 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 14 | 15 | 0.005 | 1.818 | 0.005 | 18.7 | 0.005 | 1.148 | 0.005 | 0.049 | 2.450 |
| 77 | 6 | 14 | 16 | 0.005 | 1.825 | 0.005 | 18.6 | 0.005 | 1.152 | 0.005 | 0.053 | 2.450 |
| 77 | 6 | 14 | 17 | 0.005 | 1.813 | 0.005 | 4.6 | 0.005 | 1.148 | 0.005 | 0.052 | 2.450 |
| 77 | 6 | 14 | 18 | 0.005 | 1.853 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.051 | 2.450 |
| 77 | 6 | 14 | 19 | 0.005 | 1.901 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.047 | 2.451 |
| 77 | 6 | 14 | 20 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.226 | 0.005 | 0.045 | 2.452 |
| 77 | 6 | 14 | 21 | 0.005 | 1.987 | 0.005 | 0.5 | 0.005 | 1.249 | 0.005 | 0.043 | 2.453 |
| 77 | 6 | 14 | 22 | 0.005 | 1.990 | 0.005 | 0.5 | 0.005 | 1.253 | 0.005 | 0.044 | 2.453 |
| 77 | 6 | 14 | 23 | 0.005 | 1.996 | 0.005 | 0.5 | 0.005 | 1.257 | 0.005 | 0.045 | 2.453 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 14 | 24 | 0.005 | 2.007 | 0.005 | 0.5 | 0.005 | 1.262 | 0.005 | 0.048 | 2.454 |
| 77 | 6 | 15 | 1 | 0.005 | 2.027 | 0.005 | 0.5 | 0.005 | 1.273 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 15 | 2 | 0.005 | 2.037 | 0.005 | 0.5 | 0.005 | 1.276 | 0.005 | 0.048 | 2.454 |
| 77 | 6 | 15 | 3 | 0.005 | 2.058 | 0.005 | 0.5 | 0.005 | 1.287 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 15 | 4 | 0.005 | 2.050 | 0.005 | 0.5 | 0.005 | 1.283 | 0.005 | 0.051 | 2.454 |
| 77 | 6 | 15 | 5 | 0.005 | 2.033 | 0.005 | 0.5 | 0.005 | 1.275 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 15 | 6 | 0.005 | 2.024 | 0.005 | 0.5 | 0.005 | 1.270 | 0.005 | 0.052 | 2.454 |
| 77 | 6 | 15 | 7 | 0.005 | 1.995 | 0.005 | 0.5 | 0.005 | 1.255 | 0.005 | 0.054 | 2.453 |
| 77 | 6 | 15 | 8 | 0.005 | 1.971 | 0.005 | 0.5 | 0.005 | 1.242 | 0.005 | 0.057 | 2.453 |
| 77 | 6 | 15 | 9 | 0.005 | 1.949 | 0.005 | 0.5 | 0.005 | 1.230 | 0.005 | 0.053 | 2.453 |
| 77 | 6 | 15 | 10 | 0.005 | 1.926 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 15 | 11 | 0.005 | 1.913 | 0.005 | 0.5 | 0.005 | 1.208 | 0.005 | 0.046 | 2.452 |
| 77 | 6 | 15 | 12 | 0.005 | 1.903 | 0.005 | 0.5 | 0.005 | 1.201 | 0.005 | 0.045 | 2.452 |
| 77 | 6 | 15 | 13 | 0.005 | 1.893 | 0.005 | 0.5 | 0.005 | 1.196 | 0.005 | 0.044 | 2.452 |
| 77 | 6 | 15 | 14 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.045 | 2.452 |
| 77 | 6 | 15 | 15 | 0.005 | 1.866 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.045 | 2.451 |
| 77 | 6 | 15 | 16 | 0.005 | 1.856 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.047 | 2.451 |
| 77 | 6 | 15 | 17 | 0.005 | 1.864 | 0.005 | 0.5 | 0.005 | 1.186 | 0.005 | 0.047 | 2.451 |
| 77 | 6 | 15 | 18 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.204 | 0.005 | 0.047 | 2.451 |
| 77 | 6 | 15 | 19 | 0.005 | 1.911 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.046 | 2.452 |
| 77 | 6 | 15 | 20 | 0.005 | 1.944 | 0.005 | 0.5 | 0.005 | 1.232 | 0.005 | 0.046 | 2.453 |
| 77 | 6 | 15 | 21 | 0.005 | 1.966 | 0.005 | 0.5 | 0.005 | 1.246 | 0.005 | 0.046 | 2.453 |
| 77 | 6 | 15 | 22 | 0.005 | 1.978 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.048 | 2.454 |
| 77 | 6 | 15 | 23 | 0.005 | 1.984 | 0.005 | 0.5 | 0.005 | 1.256 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 15 | 24 | 0.005 | 2.014 | 0.005 | 0.5 | 0.005 | 1.268 | 0.005 | 0.052 | 2.454 |
| 77 | 6 | 16 | 1 | 0.005 | 2.020 | 0.005 | 0.5 | 0.005 | 1.272 | 0.005 | 0.054 | 2.454 |
| 77 | 6 | 16 | 2 | 0.005 | 2.038 | 0.005 | 0.5 | 0.005 | 1.281 | 0.005 | 0.058 | 2.454 |
| 77 | 6 | 16 | 3 | 0.005 | 2.049 | 0.005 | 0.5 | 0.005 | 1.287 | 0.005 | 0.058 | 2.454 |
| 77 | 6 | 16 | 4 | 0.005 | 2.057 | 0.005 | 0.5 | 0.005 | 1.290 | 0.005 | 0.057 | 2.454 |
| 77 | 6 | 16 | 5 | 0.005 | 2.066 | 0.005 | 0.5 | 0.005 | 1.292 | 0.005 | 0.056 | 2.455 |
| 77 | 6 | 16 | 6 | 0.005 | 2.064 | 0.005 | 0.5 | 0.005 | 1.290 | 0.005 | 0.056 | 2.454 |
| 77 | 6 | 16 | 7 | 0.005 | 2.044 | 0.005 | 0.5 | 0.005 | 1.270 | 0.005 | 0.059 | 2.454 |
| 77 | 6 | 16 | 8 | 0.005 | 2.009 | 0.005 | 0.5 | 0.005 | 1.259 | 0.005 | 0.061 | 2.453 |
| 77 | 6 | 16 | 9 | 0.005 | 1.984 | 0.005 | 0.5 | 0.005 | 1.244 | 0.005 | 0.060 | 2.453 |
| 77 | 6 | 16 | 10 | 0.031 | 1.947 | 0.005 | 3.6 | 0.028 | 1.222 | 0.005 | 0.060 | 2.452 |
| 77 | 6 | 16 | 11 | 0.010 | 1.879 | 0.005 | 28.7 | 0.005 | 1.188 | 0.005 | 0.059 | 2.450 |
| 77 | 6 | 16 | 12 | 0.005 | 1.841 | 0.005 | 34.8 | 0.005 | 1.160 | 0.005 | 0.060 | 2.447 |
| 77 | 6 | 16 | 13 | 0.005 | 1.804 | 0.005 | 37.0 | 0.005 | 1.143 | 0.005 | 0.059 | 2.446 |
| 77 | 6 | 16 | 14 | 0.005 | 1.795 | 0.005 | 19.6 | 0.005 | 1.136 | 0.005 | 0.060 | 2.445 |
| 77 | 6 | 16 | 15 | 0.005 | 1.783 | 0.005 | 1.7 | 0.005 | 1.131 | 0.005 | 0.062 | 2.447 |
| 77 | 6 | 16 | 16 | 0.005 | 1.781 | 0.005 | 0.5 | 0.005 | 1.131 | 0.005 | 0.065 | 2.449 |
| 77 | 6 | 16 | 17 | 0.005 | 1.810 | 0.005 | 0.5 | 0.005 | 1.148 | 0.005 | 0.068 | 2.449 |
| 77 | 6 | 16 | 18 | 0.005 | 1.836 | 0.005 | 0.5 | 0.005 | 1.162 | 0.005 | 0.068 | 2.450 |
| 77 | 6 | 16 | 19 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.065 | 2.451 |
| 77 | 6 | 16 | 20 | 0.005 | 1.952 | 0.005 | 0.5 | 0.005 | 1.233 | 0.005 | 0.062 | 2.454 |
| 77 | 6 | 16 | 21 | 0.005 | 1.995 | 0.005 | 0.5 | 0.005 | 1.256 | 0.005 | 0.062 | 2.454 |
| 77 | 6 | 16 | 22 | 0.005 | 2.047 | 0.005 | 0.5 | 0.005 | 1.285 | 0.005 | 0.065 | 2.454 |
| 77 | 6 | 16 | 23 | 0.005 | 2.060 | 0.005 | 0.5 | 0.005 | 1.290 | 0.005 | 0.068 | 2.453 |
| 77 | 6 | 16 | 24 | 0.005 | 2.058 | 0.005 | 0.5 | 0.005 | 1.290 | 0.005 | 0.069 | 2.454 |
| 77 | 6 | 17 | 1 | 0.005 | 2.070 | 0.005 | 0.5 | 0.005 | 1.295 | 0.005 | 0.069 | 2.453 |
| 77 | 6 | 17 | 2 | 0.005 | 2.073 | 0.005 | 0.5 | 0.005 | 1.296 | 0.005 | 0.070 | 2.453 |
| 77 | 6 | 17 | 3 | 0.005 | 2.064 | 0.005 | 0.5 | 0.005 | 1.291 | 0.005 | 0.069 | 2.453 |
| 77 | 6 | 17 | 4 | 0.005 | 2.092 | 0.005 | 0.5 | 0.005 | 1.291 | 0.005 | 0.069 | 2.453 |
| 77 | 6 | 17 | 5 | 0.005 | 2.065 | 0.005 | 0.5 | 0.005 | 1.292 | 0.005 | 0.069 | 2.453 |
| 77 | 6 | 17 | 6 | 0.005 | 2.072 | 0.005 | 0.5 | 0.005 | 1.294 | 0.005 | 0.067 | 2.453 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 17 | 7 | 0.005 | 2.042 | 0.005 | 0.5 | 0.005 | 1.271 | 0.005 | 0.070 | 2.452 |
| 77 | 6 | 17 | 8 | 0.005 | 2.007 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.073 | 2.452 |
| 77 | 6 | 17 | 9 | 0.005 | 1.978 | 0.005 | 0.5 | 0.005 | 1.238 | 0.005 | 0.071 | 2.451 |
| 77 | 6 | 17 | 10 | 0.005 | 1.945 | 0.005 | 0.5 | 0.005 | 1.225 | 0.005 | 0.069 | 2.451 |
| 77 | 6 | 17 | 11 | 0.005 | 1.908 | 0.005 | 0.5 | 0.005 | 1.204 | 0.005 | 0.067 | 2.451 |
| 77 | 6 | 17 | 12 | 0.005 | 1.876 | 0.005 | 8.5 | 0.005 | 1.188 | 0.005 | 0.065 | 2.451 |
| 77 | 6 | 17 | 13 | 0.005 | 1.841 | 0.005 | 25.0 | 0.005 | 1.167 | 0.005 | 0.058 | 2.450 |
| 77 | 6 | 17 | 14 | 0.005 | 1.820 | 0.005 | 17.8 | 0.005 | 1.153 | 0.005 | 0.052 | 2.450 |
| 77 | 6 | 17 | 15 | 0.005 | 1.811 | 0.005 | 18.6 | 0.005 | 1.148 | 0.005 | 0.052 | 2.450 |
| 77 | 6 | 17 | 16 | 0.005 | 1.757 | 0.005 | 15.5 | 0.005 | 1.115 | 0.005 | 0.053 | 2.451 |
| 77 | 6 | 17 | 17 | 0.012 | 1.709 | 0.005 | 17.8 | 0.005 | 1.085 | 0.005 | 0.051 | 2.451 |
| 77 | 6 | 17 | 18 | 0.005 | 1.736 | 0.005 | 18.8 | 0.005 | 1.104 | 0.005 | 0.045 | 2.452 |
| 77 | 6 | 17 | 19 | 0.005 | 1.825 | 0.005 | 25.4 | 0.005 | 1.157 | 0.005 | 0.044 | 2.454 |
| 77 | 6 | 17 | 20 | 0.005 | 1.884 | 0.005 | 18.1 | 0.005 | 1.193 | 0.005 | 0.046 | 2.455 |
| 77 | 6 | 17 | 21 | 0.005 | 1.899 | 0.005 | 12.4 | 0.005 | 1.201 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 17 | 22 | 0.005 | 1.870 | 0.005 | 19.2 | 0.005 | 1.183 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 17 | 23 | 0.005 | 1.899 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.056 | 2.454 |
| 77 | 6 | 17 | 24 | 0.005 | 1.917 | 0.005 | 0.5 | 0.005 | 1.211 | 0.005 | 0.058 | 2.454 |
| 77 | 6 | 18 | 1 | 0.005 | 1.934 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.054 | 2.454 |
| 77 | 6 | 18 | 2 | 0.005 | 1.957 | 0.005 | 0.5 | 0.005 | 1.231 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 18 | 3 | 0.005 | 1.991 | 0.005 | 0.5 | 0.005 | 1.249 | 0.005 | 0.056 | 2.455 |
| 77 | 6 | 18 | 4 | 0.005 | 1.999 | 0.005 | 0.5 | 0.005 | 1.253 | 0.005 | 0.060 | 2.455 |
| 77 | 6 | 18 | 5 | 0.005 | 2.005 | 0.005 | 0.5 | 0.005 | 1.255 | 0.005 | 0.059 | 2.455 |
| 77 | 6 | 18 | 6 | 0.005 | 2.050 | 0.005 | 13.4 | 0.005 | 1.273 | 0.005 | 0.047 | 2.455 |
| 77 | 6 | 18 | 7 | 0.005 | 2.045 | 0.005 | 0.9 | 0.005 | 1.277 | 0.005 | 0.047 | 2.455 |
| 77 | 6 | 18 | 8 | 0.005 | 2.006 | 0.005 | 0.8 | 0.005 | 1.253 | 0.005 | 0.051 | 2.455 |
| 77 | 6 | 18 | 9 | 0.005 | 1.953 | 0.005 | 0.6 | 0.005 | 1.234 | 0.005 | 0.072 | 2.455 |
| 77 | 6 | 18 | 10 | 0.005 | 1.946 | 0.005 | 0.6 | 0.005 | 1.226 | 0.005 | 0.074 | 2.455 |
| 77 | 6 | 18 | 11 | 0.005 | 1.935 | 0.005 | 0.5 | 0.005 | 1.222 | 0.005 | 0.075 | 2.454 |
| 77 | 6 | 18 | 12 | 0.005 | 1.928 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.076 | 2.454 |
| 77 | 6 | 18 | 13 | 0.005 | 1.916 | 0.005 | 0.5 | 0.005 | 1.209 | 0.005 | 0.077 | 2.454 |
| 77 | 6 | 18 | 14 | 0.005 | 1.903 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.077 | 2.454 |
| 77 | 6 | 18 | 15 | 0.005 | 1.687 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.076 | 2.454 |
| 77 | 6 | 18 | 16 | 0.005 | 1.877 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.076 | 2.454 |
| 77 | 6 | 18 | 17 | 0.005 | 1.889 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.077 | 2.454 |
| 77 | 6 | 18 | 18 | 0.005 | 1.918 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.076 | 2.454 |
| 77 | 6 | 18 | 19 | 0.005 | 1.941 | 0.005 | 0.5 | 0.005 | 1.228 | 0.005 | 0.074 | 2.455 |
| 77 | 6 | 18 | 20 | 0.005 | 1.980 | 0.005 | 0.6 | 0.005 | 1.249 | 0.005 | 0.069 | 2.455 |
| 77 | 6 | 18 | 21 | 0.005 | 2.013 | 0.005 | 0.7 | 0.005 | 1.265 | 0.005 | 0.068 | 2.455 |
| 77 | 6 | 18 | 22 | 0.005 | 2.029 | 0.005 | 0.8 | 0.005 | 1.275 | 0.005 | 0.070 | 2.454 |
| 77 | 6 | 18 | 23 | 0.005 | 2.033 | 0.005 | 0.8 | 0.005 | 1.278 | 0.005 | 0.071 | 2.454 |
| 77 | 6 | 18 | 24 | 0.005 | 2.050 | 0.005 | 0.8 | 0.005 | 1.283 | 0.005 | 0.063 | 2.454 |
| 77 | 6 | 19 | 1 | 0.005 | 2.070 | 0.005 | 0.9 | 0.005 | 1.291 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 19 | 2 | 0.005 | 2.067 | 0.005 | 1.0 | 0.005 | 1.291 | 0.005 | 0.051 | 2.454 |
| 77 | 6 | 19 | 3 | 0.005 | 2.065 | 0.005 | 1.0 | 0.005 | 1.290 | 0.005 | 0.050 | 2.455 |
| 77 | 6 | 19 | 4 | 0.005 | 2.077 | 0.005 | 1.1 | 0.005 | 1.296 | 0.005 | 0.048 | 2.455 |
| 77 | 6 | 19 | 5 | 0.005 | 2.081 | 0.005 | 1.1 | 0.005 | 1.300 | 0.005 | 0.045 | 2.454 |
| 77 | 6 | 19 | 6 | 0.005 | 2.087 | 0.005 | 1.1 | 0.005 | 1.296 | 0.005 | 0.043 | 2.454 |
| 77 | 6 | 19 | 7 | 0.005 | 2.056 | 0.005 | 1.1 | 0.005 | 1.277 | 0.005 | 0.045 | 2.454 |
| 77 | 6 | 19 | 8 | 0.005 | 2.009 | 0.005 | 1.0 | 0.005 | 1.251 | 0.005 | 0.047 | 2.454 |
| 77 | 6 | 19 | 9 | 0.005 | 1.964 | 0.005 | 0.9 | 0.005 | 1.223 | 0.005 | 0.052 | 2.454 |
| 77 | 6 | 19 | 10 | 0.005 | 1.896 | 0.005 | 0.7 | 0.005 | 1.189 | 0.005 | 0.067 | 2.453 |
| 77 | 6 | 19 | 11 | 0.005 | 1.847 | 0.005 | 0.5 | 0.005 | 1.163 | 0.005 | 0.079 | 2.453 |
| 77 | 6 | 19 | 12 | 0.005 | 1.818 | 0.005 | 0.5 | 0.005 | 1.147 | 0.005 | 0.072 | 2.452 |
| 77 | 6 | 19 | 13 | 0.005 | 1.807 | 0.005 | 0.5 | 0.005 | 1.138 | 0.005 | 0.071 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 19 | 14 | 0.005 | 1.785 | 0.005 | 0.5 | 0.005 | 1.130 | 0.005 | 0.067 | 2.451 |
| 77 | 6 | 19 | 15 | 0.005 | 1.771 | 0.005 | 0.8 | 0.005 | 1.122 | 0.005 | 0.064 | 2.451 |
| 77 | 6 | 19 | 16 | 0.005 | 1.755 | 0.005 | 0.6 | 0.005 | 1.115 | 0.005 | 0.060 | 2.451 |
| 77 | 6 | 19 | 17 | 0.005 | 1.777 | 0.005 | 0.5 | 0.005 | 1.127 | 0.005 | 0.065 | 2.451 |
| 77 | 6 | 19 | 18 | 0.005 | 1.813 | 0.005 | 0.8 | 0.005 | 1.150 | 0.005 | 0.069 | 2.451 |
| 77 | 6 | 19 | 19 | 0.005 | 1.843 | 0.005 | 0.9 | 0.005 | 1.165 | 0.005 | 0.067 | 2.451 |
| 77 | 6 | 19 | 20 | 0.005 | 1.874 | 0.005 | 0.5 | 0.005 | 1.187 | 0.005 | 0.066 | 2.453 |
| 77 | 6 | 19 | 21 | 0.005 | 1.919 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.066 | 2.454 |
| 77 | 6 | 19 | 22 | 0.005 | 1.950 | 0.005 | 0.5 | 0.005 | 1.234 | 0.005 | 0.064 | 2.455 |
| 77 | 6 | 19 | 23 | 0.005 | 1.960 | 0.005 | 0.5 | 0.005 | 1.237 | 0.005 | 0.059 | 2.455 |
| 77 | 6 | 19 | 24 | 0.005 | 1.975 | 0.005 | 0.5 | 0.005 | 1.244 | 0.005 | 0.061 | 2.455 |
| 77 | 6 | 20 | 1 | 0.005 | 1.987 | 0.005 | 0.5 | 0.005 | 1.251 | 0.005 | 0.064 | 2.455 |
| 77 | 6 | 20 | 2 | 0.005 | 1.988 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.066 | 2.455 |
| 77 | 6 | 20 | 3 | 0.005 | 1.985 | 0.005 | 0.5 | 0.005 | 1.249 | 0.005 | 0.064 | 2.455 |
| 77 | 6 | 20 | 4 | 0.005 | 1.988 | 0.005 | 0.6 | 0.005 | 1.250 | 0.005 | 0.061 | 2.455 |
| 77 | 6 | 20 | 5 | 0.005 | 1.995 | 0.005 | 0.6 | 0.005 | 1.256 | 0.005 | 0.064 | 2.455 |
| 77 | 6 | 20 | 6 | 0.005 | 2.004 | 0.005 | 0.7 | 0.005 | 1.259 | 0.005 | 0.069 | 2.455 |
| 77 | 6 | 20 | 7 | 0.005 | 1.986 | 0.005 | 0.7 | 0.005 | 1.248 | 0.005 | 0.070 | 2.455 |
| 77 | 6 | 20 | 8 | 0.005 | 1.975 | 0.005 | 0.7 | 0.005 | 1.244 | 0.005 | 0.070 | 2.454 |
| 77 | 6 | 20 | 9 | 0.005 | 1.964 | 0.005 | 0.7 | 0.005 | 1.236 | 0.005 | 0.072 | 2.454 |
| 77 | 6 | 20 | 10 | 0.005 | 1.947 | 0.005 | 0.7 | 0.005 | 1.226 | 0.005 | 0.077 | 2.454 |
| 77 | 6 | 20 | 11 | 0.005 | 1.568 | 0.005 | 3.3 | 0.005 | 1.106 | 0.005 | 0.064 | 2.454 |
| 77 | 6 | 20 | 12 | 0.005 | 1.920 | 0.005 | 0.6 | 0.005 | 1.210 | 0.005 | 0.070 | 2.453 |
| 77 | 6 | 20 | 13 | 0.005 | 1.899 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.078 | 2.453 |
| 77 | 6 | 20 | 14 | 0.005 | 1.865 | 0.012 | 0.5 | 0.005 | 1.177 | 0.005 | 0.079 | 2.452 |
| 77 | 6 | 20 | 15 | 0.182 | 1.886 | 0.023 | 0.5 | 0.005 | 1.189 | 0.005 | 0.079 | 2.452 |
| 77 | 6 | 20 | 16 | 0.130 | 1.873 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.082 | 2.451 |
| 77 | 6 | 20 | 17 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.082 | 2.451 |
| 77 | 6 | 20 | 18 | 0.005 | 1.923 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.082 | 2.452 |
| 77 | 6 | 20 | 19 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.231 | 0.005 | 0.082 | 2.452 |
| 77 | 6 | 20 | 20 | 0.005 | 1.991 | 0.005 | 0.5 | 0.005 | 1.255 | 0.005 | 0.080 | 2.453 |
| 77 | 6 | 20 | 21 | 0.005 | 2.037 | 0.005 | 0.5 | 0.005 | 1.280 | 0.005 | 0.078 | 2.454 |
| 77 | 6 | 20 | 22 | 0.005 | 2.060 | 0.005 | 0.5 | 0.005 | 1.291 | 0.005 | 0.072 | 2.454 |
| 77 | 6 | 20 | 23 | 0.005 | 2.076 | 0.005 | 0.7 | 0.005 | 1.300 | 0.005 | 0.068 | 2.455 |
| 77 | 6 | 20 | 24 | 0.005 | 2.078 | 0.005 | 0.8 | 0.005 | 1.300 | 0.005 | 0.068 | 2.455 |
| 77 | 6 | 21 | 1 | 0.005 | 2.087 | 0.005 | 0.8 | 0.005 | 1.301 | 0.005 | 0.069 | 2.455 |
| 77 | 6 | 21 | 2 | 0.005 | 2.097 | 0.005 | 0.8 | 0.005 | 1.301 | 0.005 | 0.070 | 2.455 |
| 77 | 6 | 21 | 3 | 0.005 | 2.103 | 0.005 | 0.8 | 0.005 | 1.300 | 0.005 | 0.070 | 2.455 |
| 77 | 6 | 21 | 4 | 0.005 | 2.080 | 0.005 | 0.8 | 0.005 | 1.297 | 0.005 | 0.070 | 2.455 |
| 77 | 6 | 21 | 5 | 0.005 | 2.081 | 0.005 | 0.8 | 0.005 | 1.299 | 0.005 | 0.071 | 2.455 |
| 77 | 6 | 21 | 6 | 0.005 | 2.084 | 0.005 | 0.8 | 0.005 | 1.299 | 0.005 | 0.073 | 2.455 |
| 77 | 6 | 21 | 7 | 0.005 | 2.061 | 0.005 | 0.8 | 0.005 | 1.281 | 0.005 | 0.074 | 2.454 |
| 77 | 6 | 21 | 8 | 0.005 | 2.022 | 0.005 | 0.9 | 0.005 | 1.260 | 0.005 | 0.072 | 2.454 |
| 77 | 6 | 21 | 9 | 0.005 | 2.007 | 0.005 | 0.8 | 0.005 | 1.248 | 0.005 | 0.074 | 2.454 |
| 77 | 6 | 21 | 10 | 0.005 | 1.964 | 0.005 | 0.8 | 0.005 | 1.222 | 0.005 | 0.076 | 2.454 |
| 77 | 6 | 21 | 11 | 0.005 | 1.916 | 0.005 | 0.6 | 0.005 | 1.197 | 0.005 | 0.078 | 2.452 |
| 77 | 6 | 21 | 12 | 0.005 | 1.927 | 0.005 | 0.5 | 0.005 | 1.207 | 0.005 | 0.078 | 2.452 |
| 77 | 6 | 21 | 13 | 0.005 | 1.930 | 0.005 | 0.5 | 0.005 | 1.209 | 0.005 | 0.079 | 2.453 |
| 77 | 6 | 21 | 14 | 0.005 | 1.878 | 0.005 | 0.6 | 0.005 | 1.174 | 0.005 | 0.078 | 2.452 |
| 77 | 6 | 21 | 15 | 0.005 | 1.852 | 0.005 | 0.6 | 0.005 | 1.164 | 0.005 | 0.078 | 2.451 |
| 77 | 6 | 21 | 16 | 0.005 | 1.838 | 0.005 | 0.8 | 0.005 | 1.156 | 0.005 | 0.077 | 2.451 |
| 77 | 6 | 21 | 17 | 0.005 | 1.866 | 0.005 | 0.7 | 0.005 | 1.174 | 0.005 | 0.076 | 2.451 |
| 77 | 6 | 21 | 18 | 0.005 | 1.908 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.075 | 2.452 |
| 77 | 6 | 21 | 19 | 0.005 | 1.920 | 0.005 | 0.5 | 0.005 | 1.205 | 0.005 | 0.072 | 2.453 |
| 77 | 6 | 21 | 20 | 0.005 | 1.981 | 0.005 | 0.6 | 0.005 | 1.239 | 0.005 | 0.065 | 2.454 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 21 | 21 | 0.005 | 2.020 | 0.005 | 0.8 | 0.005 | 1.264 | 0.005 | 0.066 | 2.455 |
| 77 | 6 | 21 | 22 | 0.005 | 2.040 | 0.005 | 0.9 | 0.005 | 1.273 | 0.005 | 0.063 | 2.455 |
| 77 | 6 | 21 | 23 | 0.005 | 2.035 | 0.005 | 0.9 | 0.005 | 1.271 | 0.005 | 0.067 | 2.455 |
| 77 | 6 | 21 | 24 | 0.005 | 2.018 | 0.005 | 0.9 | 0.005 | 1.265 | 0.005 | 0.070 | 2.455 |
| 77 | 6 | 22 | 1 | 0.005 | 2.016 | 0.005 | 0.9 | 0.005 | 1.264 | 0.005 | 0.067 | 2.455 |
| 77 | 6 | 22 | 2 | 0.005 | 2.009 | 0.005 | 0.9 | 0.005 | 1.261 | 0.005 | 0.068 | 2.456 |
| 77 | 6 | 22 | 3 | 0.005 | 2.006 | 0.005 | 0.9 | 0.005 | 1.258 | 0.005 | 0.067 | 2.456 |
| 77 | 6 | 22 | 4 | 0.005 | 2.007 | 0.005 | 0.9 | 0.005 | 1.260 | 0.005 | 0.065 | 2.456 |
| 77 | 6 | 22 | 5 | 0.005 | 2.008 | 0.005 | 0.9 | 0.005 | 1.260 | 0.005 | 0.066 | 2.456 |
| 77 | 6 | 22 | 6 | 0.005 | 2.005 | 0.005 | 1.0 | 0.005 | 1.255 | 0.005 | 0.067 | 2.456 |
| 77 | 6 | 22 | 7 | 0.005 | 1.993 | 0.005 | 1.0 | 0.005 | 1.239 | 0.005 | 0.069 | 2.456 |
| 77 | 6 | 22 | 8 | 0.005 | 1.957 | 0.005 | 1.0 | 0.005 | 1.220 | 0.005 | 0.068 | 2.455 |
| 77 | 6 | 22 | 9 | 0.005 | 1.916 | 0.005 | 1.0 | 0.005 | 1.194 | 0.005 | 0.072 | 2.454 |
| 77 | 6 | 22 | 10 | 0.005 | 1.862 | 0.005 | 0.8 | 0.005 | 1.164 | 0.005 | 0.075 | 2.453 |
| 77 | 6 | 22 | 11 | 0.005 | 1.819 | 0.005 | 0.8 | 0.005 | 1.137 | 0.005 | 0.074 | 2.452 |
| 77 | 6 | 22 | 12 | 0.005 | 1.772 | 0.005 | 0.6 | 0.005 | 1.117 | 0.005 | 0.078 | 2.451 |
| 77 | 6 | 22 | 13 | 0.005 | 1.761 | 0.005 | 0.5 | 0.005 | 1.108 | 0.005 | 0.079 | 2.454 |
| 77 | 6 | 22 | 14 | 0.005 | 1.776 | 0.005 | 0.5 | 0.005 | 1.121 | 0.005 | 0.078 | 2.452 |
| 77 | 6 | 22 | 15 | 0.005 | 1.770 | 0.005 | 0.5 | 0.005 | 1.117 | 0.005 | 0.077 | 2.451 |
| 77 | 6 | 22 | 16 | 0.005 | 1.767 | 0.005 | 0.6 | 0.005 | 1.111 | 0.005 | 0.074 | 2.448 |
| 77 | 6 | 22 | 17 | 0.005 | 1.765 | 0.005 | 1.3 | 0.005 | 1.117 | 0.005 | 0.073 | 2.448 |
| 77 | 6 | 22 | 18 | 0.005 | 1.782 | 0.005 | 2.5 | 0.005 | 1.129 | 0.005 | 0.073 | 2.448 |
| 77 | 6 | 22 | 19 | 0.005 | 1.775 | 0.005 | 27.0 | 0.005 | 1.128 | 0.005 | 0.069 | 2.448 |
| 77 | 6 | 22 | 20 | 0.005 | 1.834 | 0.005 | 9.3 | 0.005 | 1.154 | 0.005 | 0.063 | 2.449 |
| 77 | 6 | 22 | 21 | 0.005 | 1.885 | 0.005 | 1.3 | 0.005 | 1.185 | 0.005 | 0.064 | 2.450 |
| 77 | 6 | 22 | 22 | 0.005 | 1.913 | 0.005 | 1.8 | 0.005 | 1.203 | 0.005 | 0.066 | 2.451 |
| 77 | 6 | 22 | 23 | 0.005 | 1.943 | 0.005 | 1.8 | 0.005 | 1.221 | 0.005 | 0.066 | 2.452 |
| 77 | 6 | 22 | 24 | 0.005 | 1.967 | 0.005 | 2.0 | 0.005 | 1.232 | 0.005 | 0.063 | 2.453 |
| 77 | 6 | 23 | 1 | 0.005 | 1.996 | 0.005 | 2.1 | 0.005 | 1.246 | 0.005 | 0.058 | 2.455 |
| 77 | 6 | 23 | 2 | 0.005 | 1.994 | 0.005 | 2.2 | 0.005 | 1.246 | 0.005 | 0.060 | 2.456 |
| 77 | 6 | 23 | 3 | 0.005 | 1.994 | 0.005 | 2.2 | 0.005 | 1.248 | 0.005 | 0.056 | 2.456 |
| 77 | 6 | 23 | 4 | 0.005 | 1.990 | 0.005 | 2.2 | 0.005 | 1.246 | 0.005 | 0.054 | 2.456 |
| 77 | 6 | 23 | 5 | 0.005 | 1.991 | 0.005 | 2.2 | 0.005 | 1.249 | 0.005 | 0.052 | 2.455 |
| 77 | 6 | 23 | 6 | 0.005 | 1.988 | 0.005 | 2.2 | 0.005 | 1.244 | 0.005 | 0.051 | 2.454 |
| 77 | 6 | 23 | 7 | 0.005 | 1.968 | 0.005 | 2.3 | 0.005 | 1.228 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 23 | 8 | 0.005 | 1.937 | 0.005 | 2.2 | 0.005 | 1.209 | 0.005 | 0.052 | 2.452 |
| 77 | 6 | 23 | 9 | 0.005 | 1.933 | 0.005 | 2.1 | 0.005 | 1.183 | 0.005 | 0.056 | 2.451 |
| 77 | 6 | 23 | 10 | 0.005 | 1.957 | 0.005 | 2.4 | 0.005 | 1.163 | 0.005 | 0.063 | 2.450 |
| 77 | 6 | 23 | 11 | 0.005 | 1.837 | 0.005 | 2.1 | 0.005 | 1.148 | 0.005 | 0.067 | 2.452 |
| 77 | 6 | 23 | 12 | 0.005 | 1.869 | 0.005 | 2.1 | 0.005 | 1.164 | 0.005 | 0.067 | 2.452 |
| 77 | 6 | 23 | 13 | 0.005 | 1.893 | 0.005 | 2.1 | 0.005 | 1.165 | 0.005 | 0.066 | 2.453 |
| 77 | 6 | 23 | 14 | 0.005 | 1.860 | 0.005 | 2.1 | 0.005 | 1.165 | 0.005 | 0.065 | 2.453 |
| 77 | 6 | 23 | 15 | 0.005 | 1.836 | 0.005 | 2.1 | 0.005 | 1.153 | 0.005 | 0.065 | 2.452 |
| 77 | 6 | 23 | 16 | 0.005 | 1.867 | 0.005 | 2.0 | 0.005 | 1.172 | 0.005 | 0.064 | 2.452 |
| 77 | 6 | 23 | 17 | 0.005 | 1.881 | 0.005 | 2.1 | 0.005 | 1.183 | 0.005 | 0.064 | 2.453 |
| 77 | 6 | 23 | 18 | 0.005 | 1.933 | 0.005 | 2.1 | 0.005 | 1.208 | 0.005 | 0.065 | 2.452 |
| 77 | 6 | 23 | 19 | 0.005 | 1.936 | 0.005 | 2.2 | 0.005 | 1.213 | 0.005 | 0.060 | 2.451 |
| 77 | 6 | 23 | 20 | 0.005 | 1.963 | 0.005 | 2.3 | 0.005 | 1.231 | 0.005 | 0.060 | 2.453 |
| 77 | 6 | 23 | 21 | 0.005 | 1.984 | 0.005 | 2.4 | 0.005 | 1.245 | 0.005 | 0.055 | 2.453 |
| 77 | 6 | 23 | 22 | 0.005 | 1.996 | 0.005 | 2.4 | 0.005 | 1.247 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 23 | 23 | 0.005 | 1.987 | 0.005 | 2.4 | 0.005 | 1.242 | 0.005 | 0.056 | 2.453 |
| 77 | 6 | 23 | 24 | 0.005 | 1.972 | 0.005 | 2.3 | 0.005 | 1.228 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 24 | 1 | 0.005 | 1.973 | 0.005 | 2.3 | 0.005 | 1.230 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 24 | 2 | 0.005 | 1.971 | 0.005 | 2.3 | 0.005 | 1.233 | 0.005 | 0.053 | 2.453 |
| 77 | 6 | 24 | 3 | 0.005 | 1.976 | 0.005 | 2.4 | 0.005 | 1.235 | 0.005 | 0.055 | 2.453 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 24 | 4 | 0.005 | 1.977 | 0.005 | 2.4 | 0.005 | 1.236 | 0.005 | 0.054 | 2.453 |
| 77 | 6 | 24 | 5 | 0.005 | 1.976 | 0.005 | 2.4 | 0.005 | 1.236 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 24 | 6 | 0.005 | 1.978 | 0.005 | 2.4 | 0.005 | 1.226 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 24 | 7 | 0.005 | 1.950 | 0.005 | 2.4 | 0.005 | 1.215 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 24 | 8 | 0.005 | 1.917 | 0.005 | 2.4 | 0.005 | 1.196 | 0.005 | 0.054 | 2.452 |
| 77 | 6 | 24 | 9 | 0.005 | 1.887 | 0.005 | 2.4 | 0.005 | 1.176 | 0.005 | 0.054 | 2.451 |
| 77 | 6 | 24 | 10 | 0.005 | 1.857 | 0.005 | 2.3 | 0.005 | 1.160 | 0.005 | 0.055 | 2.451 |
| 77 | 6 | 24 | 11 | 0.005 | 1.822 | 0.005 | 2.2 | 0.005 | 1.139 | 0.005 | 0.054 | 2.450 |
| 77 | 6 | 24 | 12 | 0.005 | 1.782 | 0.005 | 2.2 | 0.005 | 1.120 | 0.005 | 0.050 | 2.450 |
| 77 | 6 | 24 | 13 | 0.005 | 1.791 | 0.005 | 2.1 | 0.005 | 1.127 | 0.005 | 0.047 | 2.451 |
| 77 | 6 | 24 | 14 | 0.005 | 1.795 | 0.005 | 2.1 | 0.005 | 1.129 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 24 | 15 | 0.005 | 1.812 | 0.005 | 2.1 | 0.005 | 1.139 | 0.005 | 0.050 | 2.451 |
| 77 | 6 | 24 | 16 | 0.005 | 1.844 | 0.005 | 2.1 | 0.005 | 1.161 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 24 | 17 | 0.005 | 2.005 | 0.005 | 2.1 | 0.005 | 1.108 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 24 | 18 | 0.005 | 1.849 | 0.005 | 2.1 | 0.005 | 1.162 | 0.005 | 0.051 | 2.452 |
| 77 | 6 | 24 | 19 | 0.005 | 1.841 | 0.005 | 2.2 | 0.005 | 1.157 | 0.005 | 0.052 | 2.452 |
| 77 | 6 | 24 | 20 | 0.005 | 1.867 | 0.005 | 2.2 | 0.005 | 1.174 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 24 | 21 | 0.005 | 1.891 | 0.005 | 2.3 | 0.005 | 1.195 | 0.005 | 0.049 | 2.453 |
| 77 | 6 | 24 | 22 | 0.005 | 1.905 | 0.005 | 2.3 | 0.005 | 1.201 | 0.005 | 0.050 | 2.453 |
| 77 | 6 | 24 | 23 | 0.005 | 1.921 | 0.005 | 2.4 | 0.005 | 1.211 | 0.005 | 0.049 | 2.453 |
| 77 | 6 | 24 | 24 | 0.005 | 1.932 | 0.005 | 2.4 | 0.005 | 1.216 | 0.005 | 0.048 | 2.453 |
| 77 | 6 | 25 | 1 | 0.005 | 1.930 | 0.005 | 2.4 | 0.005 | 1.215 | 0.005 | 0.050 | 2.453 |
| 77 | 6 | 25 | 2 | 0.005 | 1.927 | 0.005 | 2.4 | 0.005 | 1.216 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 25 | 3 | 0.005 | 1.936 | 0.005 | 2.4 | 0.005 | 1.210 | 0.005 | 0.048 | 2.453 |
| 77 | 6 | 25 | 4 | 0.005 | 1.931 | 0.005 | 2.5 | 0.005 | 1.215 | 0.005 | 0.049 | 2.454 |
| 77 | 6 | 25 | 5 | 0.005 | 1.928 | 0.005 | 2.5 | 0.005 | 1.214 | 0.005 | 0.050 | 2.453 |
| 77 | 6 | 25 | 6 | 0.005 | 1.930 | 0.005 | 2.5 | 0.005 | 1.205 | 0.005 | 0.049 | 2.453 |
| 77 | 6 | 25 | 7 | 0.005 | 1.916 | 0.005 | 2.6 | 0.005 | 1.193 | 0.005 | 0.049 | 2.453 |
| 77 | 6 | 25 | 8 | 0.005 | 1.870 | 0.005 | 2.6 | 0.005 | 1.177 | 0.005 | 0.052 | 2.453 |
| 77 | 6 | 25 | 9 | 0.005 | 1.849 | 0.005 | 2.4 | 0.005 | 1.159 | 0.005 | 0.054 | 2.452 |
| 77 | 6 | 25 | 10 | 0.005 | 1.816 | 0.005 | 2.5 | 0.005 | 1.136 | 0.005 | 0.055 | 2.451 |
| 77 | 6 | 25 | 11 | 0.005 | 1.807 | 0.005 | 2.2 | 0.005 | 1.127 | 0.005 | 0.055 | 2.451 |
| 77 | 6 | 25 | 12 | 0.005 | 1.774 | 0.005 | 2.3 | 0.005 | 1.107 | 0.005 | 0.053 | 2.451 |
| 77 | 6 | 25 | 13 | 0.005 | 1.731 | 0.005 | 2.3 | 0.005 | 1.090 | 0.005 | 0.054 | 2.450 |
| 77 | 6 | 25 | 14 | 0.005 | 1.728 | 0.005 | 2.3 | 0.005 | 1.088 | 0.005 | 0.055 | 2.450 |
| 77 | 6 | 25 | 15 | 0.005 | 1.731 | 0.005 | 2.2 | 0.005 | 1.095 | 0.005 | 0.056 | 2.451 |
| 77 | 6 | 25 | 16 | 0.005 | 1.760 | 0.005 | 2.2 | 0.005 | 1.115 | 0.005 | 0.055 | 2.451 |
| 77 | 6 | 25 | 17 | 0.005 | 1.778 | 0.005 | 2.2 | 0.005 | 1.126 | 0.005 | 0.052 | 2.451 |
| 77 | 6 | 25 | 18 | 0.005 | 1.816 | 0.005 | 2.1 | 0.005 | 1.148 | 0.005 | 0.053 | 2.452 |
| 77 | 6 | 25 | 19 | 0.005 | 1.843 | 0.005 | 2.3 | 0.005 | 1.164 | 0.005 | 0.055 | 2.452 |
| 77 | 6 | 25 | 20 | 0.005 | 1.865 | 0.005 | 2.5 | 0.005 | 1.174 | 0.005 | 0.052 | 2.452 |
| 77 | 6 | 25 | 21 | 0.005 | 1.878 | 0.005 | 2.5 | 0.005 | 1.183 | 0.005 | 0.051 | 2.453 |
| 77 | 6 | 25 | 22 | 0.005 | 1.896 | 0.005 | 2.5 | 0.005 | 1.190 | 0.005 | 0.051 | 2.454 |
| 77 | 6 | 25 | 23 | 0.005 | 1.926 | 0.005 | 2.5 | 0.005 | 1.195 | 0.005 | 0.049 | 2.455 |
| 77 | 6 | 25 | 24 | 0.005 | 1.911 | 0.005 | 2.5 | 0.005 | 1.196 | 0.005 | 0.049 | 2.455 |
| 77 | 6 | 26 | 1 | 0.005 | 1.909 | 0.005 | 2.5 | 0.005 | 1.199 | 0.005 | 0.049 | 2.455 |
| 77 | 6 | 26 | 2 | 0.005 | 1.909 | 0.005 | 2.5 | 0.005 | 1.202 | 0.005 | 0.052 | 2.454 |
| 77 | 6 | 26 | 3 | 0.005 | 1.906 | 0.005 | 2.5 | 0.005 | 1.198 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 26 | 4 | 0.005 | 1.907 | 0.005 | 2.5 | 0.005 | 1.199 | 0.005 | 0.053 | 2.454 |
| 77 | 6 | 26 | 5 | 0.005 | 1.909 | 0.005 | 2.5 | 0.005 | 1.197 | 0.005 | 0.050 | 2.454 |
| 77 | 6 | 26 | 6 | 0.005 | 1.906 | 0.005 | 2.5 | 0.005 | 1.196 | 0.005 | 0.046 | 2.454 |
| 77 | 6 | 26 | 7 | 0.005 | 1.900 | 0.005 | 2.6 | 0.005 | 1.183 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 26 | 8 | 0.005 | 1.861 | 0.005 | 2.6 | 0.005 | 1.162 | 0.005 | 0.048 | 2.453 |
| 77 | 6 | 26 | 9 | 0.005 | 1.822 | 0.005 | 2.4 | 0.005 | 1.140 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 26 | 10 | 0.005 | 1.789 | 0.005 | 2.6 | 0.005 | 1.123 | 0.005 | 0.048 | 2.453 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 26 | 11 | 0.005 | 1.757 | 0.005 | 2.4 | 0.005 | 1.105 | 0.005 | 0.049 | 2.452 |
| 77 | 6 | 26 | 12 | 0.005 | 1.733 | 0.005 | 2.3 | 0.005 | 1.092 | 0.005 | 0.048 | 2.450 |
| 77 | 6 | 26 | 13 | 0.005 | 1.726 | 0.005 | 0.5 | 0.005 | 1.085 | 0.005 | 0.047 | 2.450 |
| 77 | 6 | 26 | 14 | 0.005 | 1.706 | 0.005 | 0.5 | 0.005 | 1.078 | 0.005 | 0.046 | 2.450 |
| 77 | 6 | 26 | 15 | 0.005 | 1.704 | 0.005 | 0.5 | 0.005 | 1.081 | 0.005 | 0.044 | 2.449 |
| 77 | 6 | 26 | 16 | 0.005 | 1.711 | 0.005 | 0.5 | 0.005 | 1.083 | 0.005 | 0.043 | 2.449 |
| 77 | 6 | 26 | 17 | 0.005 | 1.713 | 0.005 | 0.5 | 0.005 | 1.088 | 0.005 | 0.042 | 2.449 |
| 77 | 6 | 26 | 18 | 0.005 | 1.762 | 0.005 | 0.5 | 0.005 | 1.110 | 0.005 | 0.045 | 2.450 |
| 77 | 6 | 26 | 19 | 0.005 | 1.786 | 0.005 | 0.5 | 0.005 | 1.126 | 0.005 | 0.043 | 2.450 |
| 77 | 6 | 26 | 20 | 0.005 | 1.823 | 0.005 | 0.5 | 0.005 | 1.151 | 0.005 | 0.041 | 2.450 |
| 77 | 6 | 26 | 21 | 0.005 | 1.848 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.040 | 2.450 |
| 77 | 6 | 26 | 22 | 0.005 | 1.859 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.038 | 2.450 |
| 77 | 6 | 26 | 23 | 0.005 | 1.853 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.040 | 2.450 |
| 77 | 6 | 26 | 24 | 0.005 | 1.856 | 0.005 | 0.5 | 0.005 | 1.169 | 0.005 | 0.042 | 2.450 |
| 77 | 6 | 27 | 1 | 0.005 | 1.866 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.042 | 2.451 |
| 77 | 6 | 27 | 2 | 0.005 | 1.868 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.042 | 2.451 |
| 77 | 6 | 27 | 3 | 0.005 | 1.857 | 0.005 | 0.5 | 0.005 | 1.169 | 0.005 | 0.040 | 2.451 |
| 77 | 6 | 27 | 4 | 0.005 | 1.859 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.041 | 2.451 |
| 77 | 6 | 27 | 5 | 0.005 | 1.861 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.042 | 2.451 |
| 77 | 6 | 27 | 6 | 0.005 | 1.872 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.038 | 2.451 |
| 77 | 6 | 27 | 7 | 0.005 | 1.861 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.040 | 2.450 |
| 77 | 6 | 27 | 8 | 0.005 | 1.811 | 0.005 | 0.5 | 0.005 | 1.140 | 0.005 | 0.044 | 2.450 |
| 77 | 6 | 27 | 9 | 0.005 | 1.764 | 0.005 | 0.5 | 0.005 | 1.112 | 0.005 | 0.044 | 2.447 |
| 77 | 6 | 27 | 10 | 0.005 | 1.263 | 0.005 | 0.5 | 0.005 | 0.847 | 0.005 | 0.044 | 2.447 |
| 77 | 6 | 27 | 11 | 0.005 | 1.794 | 0.017 | 0.5 | 0.005 | 1.128 | 0.014 | 0.048 | 2.449 |
| 77 | 6 | 27 | 12 | 0.027 | 1.787 | 0.057 | 0.5 | 0.005 | 1.130 | 0.039 | 0.051 | 2.449 |
| 77 | 6 | 27 | 13 | 0.064 | 1.800 | 0.085 | 0.5 | 0.005 | 1.132 | 0.005 | 0.051 | 2.449 |
| 77 | 6 | 27 | 14 | 0.013 | 1.774 | 0.019 | 0.5 | 0.005 | 1.117 | 0.005 | 0.051 | 2.449 |
| 77 | 6 | 27 | 15 | 0.005 | 1.752 | 0.005 | 0.5 | 0.005 | 1.103 | 0.005 | 0.051 | 2.448 |
| 77 | 6 | 27 | 16 | 0.005 | 1.732 | 0.005 | 0.5 | 0.005 | 1.094 | 0.005 | 0.052 | 2.448 |
| 77 | 6 | 27 | 17 | 0.005 | 1.725 | 0.005 | 0.5 | 0.005 | 1.091 | 0.005 | 0.051 | 2.448 |
| 77 | 6 | 27 | 18 | 0.005 | 1.722 | 0.005 | 0.5 | 0.005 | 1.094 | 0.005 | 0.051 | 2.448 |
| 77 | 6 | 27 | 19 | 0.005 | 1.789 | 0.005 | 0.5 | 0.005 | 1.139 | 0.005 | 0.052 | 2.449 |
| 77 | 6 | 27 | 20 | 0.005 | 1.866 | 0.005 | 0.5 | 0.005 | 1.176 | 0.005 | 0.052 | 2.450 |
| 77 | 6 | 27 | 21 | 0.005 | 1.912 | 0.005 | 0.5 | 0.005 | 1.201 | 0.005 | 0.049 | 2.451 |
| 77 | 6 | 27 | 22 | 0.005 | 1.946 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.050 | 2.451 |
| 77 | 6 | 27 | 23 | 0.005 | 1.968 | 0.005 | 0.5 | 0.005 | 1.229 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 27 | 24 | 0.005 | 1.972 | 0.005 | 0.5 | 0.005 | 1.233 | 0.005 | 0.047 | 2.452 |
| 77 | 6 | 28 | 1 | 0.005 | 1.963 | 0.005 | 0.5 | 0.005 | 1.231 | 0.005 | 0.040 | 2.452 |
| 77 | 6 | 28 | 2 | 0.005 | 1.955 | 0.005 | 0.5 | 0.005 | 1.228 | 0.005 | 0.034 | 2.452 |
| 77 | 6 | 28 | 3 | 0.005 | 1.951 | 0.005 | 0.5 | 0.005 | 1.224 | 0.005 | 0.032 | 2.452 |
| 77 | 6 | 28 | 4 | 0.005 | 1.943 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.031 | 2.453 |
| 77 | 6 | 28 | 5 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.222 | 0.005 | 0.031 | 2.453 |
| 77 | 6 | 28 | 6 | 0.005 | 1.953 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.030 | 2.453 |
| 77 | 6 | 28 | 7 | 0.005 | 1.949 | 0.005 | 0.5 | 0.005 | 1.209 | 0.005 | 0.031 | 2.453 |
| 77 | 6 | 28 | 8 | 0.005 | 1.914 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.037 | 2.452 |
| 77 | 6 | 28 | 9 | 0.005 | 1.871 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.040 | 2.451 |
| 77 | 6 | 28 | 10 | 0.005 | 1.831 | 0.005 | 0.5 | 0.005 | 1.149 | 0.005 | 0.042 | 2.451 |
| 77 | 6 | 28 | 11 | 0.005 | 1.793 | 0.005 | 0.5 | 0.005 | 1.129 | 0.005 | 0.041 | 2.450 |
| 77 | 6 | 28 | 12 | 0.005 | 1.762 | 0.005 | 0.5 | 0.005 | 1.114 | 0.005 | 0.039 | 2.450 |
| 77 | 6 | 28 | 13 | 0.005 | 1.751 | 0.005 | 0.5 | 0.005 | 1.107 | 0.005 | 0.038 | 2.450 |
| 77 | 6 | 28 | 14 | 0.005 | 1.753 | 0.005 | 0.5 | 0.005 | 1.105 | 0.005 | 0.041 | 2.449 |
| 77 | 6 | 28 | 15 | 0.005 | 1.736 | 0.005 | 0.5 | 0.005 | 1.095 | 0.005 | 0.043 | 2.449 |
| 77 | 6 | 28 | 16 | 0.005 | 1.710 | 0.005 | 0.5 | 0.005 | 1.083 | 0.005 | 0.038 | 2.449 |
| 77 | 6 | 28 | 17 | 0.005 | 1.723 | 0.005 | 0.5 | 0.005 | 1.091 | 0.005 | 0.041 | 2.448 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | ACI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 28 | 18 | 0.005 | 1.745 | 0.005 | 0.5 | 0.005 | 1.104 | 0.005 | 0.041 | 2.448 |
| 77 | 6 | 28 | 19 | 0.005 | 1.763 | 0.005 | 0.5 | 0.005 | 1.115 | 0.005 | 0.038 | 2.449 |
| 77 | 6 | 28 | 20 | 0.005 | 1.800 | 0.005 | 0.5 | 0.005 | 1.137 | 0.005 | 0.034 | 2.449 |
| 77 | 6 | 28 | 21 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.038 | 2.451 |
| 77 | 6 | 28 | 22 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.042 | 2.451 |
| 77 | 6 | 28 | 23 | 0.005 | 1.915 | 0.005 | 0.5 | 0.005 | 1.206 | 0.005 | 0.046 | 2.452 |
| 77 | 6 | 28 | 24 | 0.005 | 1.932 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.047 | 2.453 |
| 77 | 6 | 29 | 1 | 0.005 | 1.935 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.045 | 2.453 |
| 77 | 6 | 29 | 2 | 0.005 | 1.945 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.043 | 2.453 |
| 77 | 6 | 29 | 3 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.223 | 0.005 | 0.042 | 2.453 |
| 77 | 6 | 29 | 4 | 0.005 | 1.945 | 0.005 | 0.5 | 0.005 | 1.222 | 0.005 | 0.038 | 2.453 |
| 77 | 6 | 29 | 5 | 0.005 | 1.941 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.036 | 2.453 |
| 77 | 6 | 29 | 6 | 0.005 | 1.938 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.035 | 2.453 |
| 77 | 6 | 29 | 7 | 0.005 | 1.937 | 0.005 | 0.5 | 0.005 | 1.207 | 0.005 | 0.040 | 2.453 |
| 77 | 6 | 29 | 8 | 0.005 | 1.900 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.042 | 2.452 |
| 77 | 6 | 29 | 9 | 0.005 | 1.867 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.043 | 2.452 |
| 77 | 6 | 29 | 10 | 0.005 | 1.851 | 0.005 | 0.5 | 0.005 | 1.143 | 0.005 | 0.043 | 2.451 |
| 77 | 6 | 29 | 11 | 0.005 | 1.796 | 0.005 | 0.5 | 0.005 | 1.129 | 0.005 | 0.042 | 2.450 |
| 77 | 6 | 29 | 12 | 0.005 | 1.778 | 0.005 | 0.5 | 0.005 | 1.118 | 0.005 | 0.044 | 2.450 |
| 77 | 6 | 29 | 13 | 0.005 | 1.775 | 0.005 | 0.5 | 0.005 | 1.115 | 0.005 | 0.045 | 2.449 |
| 77 | 6 | 29 | 14 | 0.005 | 1.806 | 0.005 | 0.5 | 0.005 | 1.140 | 0.005 | 0.046 | 2.450 |
| 77 | 6 | 29 | 15 | 0.005 | 1.827 | 0.005 | 0.5 | 0.005 | 1.149 | 0.005 | 0.047 | 2.450 |
| 77 | 6 | 29 | 16 | 0.005 | 0.187 | 0.005 | 0.5 | 0.005 | 0.103 | 0.005 | 0.046 | 2.450 |
| 77 | 6 | 29 | 17 | 0.005 | 1.211 | 0.005 | 0.5 | 0.005 | 0.748 | 0.005 | 0.046 | 2.450 |
| 77 | 6 | 29 | 18 | 0.005 | 1.915 | 0.005 | 8.8 | 0.005 | 1.204 | 0.005 | 0.046 | 2.450 |
| 77 | 6 | 29 | 19 | 0.005 | 1.942 | 0.005 | 17.9 | 0.005 | 1.219 | 0.005 | 0.048 | 2.450 |
| 77 | 6 | 29 | 20 | 0.005 | 1.966 | 0.005 | 33.5 | 0.005 | 1.234 | 0.005 | 0.049 | 2.452 |
| 77 | 6 | 29 | 21 | 0.005 | 1.993 | 0.005 | 26.7 | 0.005 | 1.250 | 0.005 | 0.048 | 2.452 |
| 77 | 6 | 29 | 22 | 0.005 | 1.996 | 0.005 | 18.5 | 0.005 | 1.253 | 0.005 | 0.047 | 2.452 |
| 77 | 6 | 29 | 23 | 0.005 | 1.974 | 0.005 | 9.0 | 0.005 | 1.239 | 0.005 | 0.045 | 2.452 |
| 77 | 6 | 29 | 24 | 0.005 | 1.986 | 0.005 | 0.5 | 0.005 | 1.243 | 0.005 | 0.043 | 2.452 |
| 77 | 6 | 30 | 1 | 0.005 | 2.003 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.043 | 2.452 |
| 77 | 6 | 30 | 2 | 0.005 | 2.011 | 0.005 | 0.5 | 0.005 | 1.256 | 0.005 | 0.042 | 2.452 |
| 77 | 6 | 30 | 3 | 0.005 | 2.006 | 0.005 | 0.5 | 0.005 | 1.257 | 0.005 | 0.039 | 2.453 |
| 77 | 6 | 30 | 4 | 0.005 | 2.014 | 0.005 | 0.5 | 0.005 | 1.261 | 0.005 | 0.039 | 2.453 |
| 77 | 6 | 30 | 5 | 0.005 | 2.026 | 0.005 | 0.5 | 0.005 | 1.266 | 0.005 | 0.041 | 2.453 |
| 77 | 6 | 30 | 6 | 0.005 | 2.036 | 0.005 | 1.3 | 0.005 | 1.265 | 0.005 | 0.040 | 2.453 |
| 77 | 6 | 30 | 7 | 0.005 | 2.049 | 0.005 | 7.0 | 0.005 | 1.272 | 0.005 | 0.042 | 2.453 |
| 77 | 6 | 30 | 8 | 0.005 | 2.050 | 0.005 | 10.4 | 0.005 | 1.275 | 0.005 | 0.041 | 2.452 |
| 77 | 6 | 30 | 9 | 0.005 | 2.026 | 0.005 | 0.5 | 0.005 | 1.263 | 0.005 | 0.041 | 2.452 |
| 77 | 6 | 30 | 10 | 0.005 | 2.001 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.043 | 2.452 |
| 77 | 6 | 30 | 11 | 0.005 | 1.997 | 0.005 | 0.5 | 0.005 | 1.247 | 0.005 | 0.042 | 2.452 |
| 77 | 6 | 30 | 12 | 0.005 | 1.980 | 0.005 | 0.5 | 0.005 | 1.240 | 0.005 | 0.039 | 2.452 |
| 77 | 6 | 30 | 13 | 0.005 | 1.968 | 0.005 | 0.5 | 0.005 | 1.233 | 0.005 | 0.037 | 2.452 |
| 77 | 6 | 30 | 14 | 0.005 | 1.962 | 0.005 | 0.5 | 0.005 | 1.226 | 0.005 | 0.036 | 2.452 |
| 77 | 6 | 30 | 15 | 0.005 | 1.948 | 0.005 | 0.5 | 0.005 | 1.223 | 0.005 | 0.034 | 2.451 |
| 77 | 6 | 30 | 16 | 0.005 | 1.942 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.033 | 2.450 |
| 77 | 6 | 30 | 17 | 0.005 | 1.943 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.035 | 2.450 |
| 77 | 6 | 30 | 18 | 0.005 | 1.954 | 0.005 | 0.5 | 0.005 | 1.226 | 0.005 | 0.037 | 2.450 |
| 77 | 6 | 30 | 19 | 0.005 | 1.974 | 0.005 | 0.5 | 0.005 | 1.236 | 0.005 | 0.037 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MO | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 1 | 16 | 0.005 | 1.965 | 0.005 | 0.8 | 0.005 | 1.231 | 0.005 | 0.041 | 2.448 |
| 77 | 7 | 1 | 17 | 0.005 | 1.975 | 0.005 | 0.6 | 0.005 | 1.234 | 0.005 | 0.040 | 2.447 |
| 77 | 7 | 1 | 18 | 0.005 | 1.966 | 0.005 | 0.5 | 0.005 | 1.232 | 0.005 | 0.042 | 2.447 |
| 77 | 7 | 1 | 19 | 0.005 | 1.943 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.042 | 2.447 |
| 77 | 7 | 1 | 20 | 0.005 | 1.951 | 0.005 | 0.5 | 0.005 | 1.224 | 0.005 | 0.042 | 2.448 |
| 77 | 7 | 1 | 21 | 0.005 | 1.960 | 0.005 | 0.5 | 0.005 | 1.230 | 0.005 | 0.041 | 2.448 |
| 77 | 7 | 1 | 22 | 0.005 | 1.983 | 0.005 | 0.5 | 0.005 | 1.242 | 0.005 | 0.038 | 2.449 |
| 77 | 7 | 1 | 23 | 0.005 | 1.978 | 0.005 | 0.5 | 0.005 | 1.240 | 0.005 | 0.039 | 2.449 |
| 77 | 7 | 1 | 24 | 0.005 | 1.991 | 0.005 | 0.5 | 0.005 | 1.247 | 0.005 | 0.038 | 2.449 |
| 77 | 7 | 2 | 1 | 0.005 | 2.007 | 0.005 | 0.5 | 0.005 | 1.259 | 0.005 | 0.042 | 2.451 |
| 77 | 7 | 2 | 2 | 0.005 | 1.996 | 0.005 | 0.5 | 0.005 | 1.252 | 0.005 | 0.042 | 2.449 |
| 77 | 7 | 2 | 3 | 0.005 | 2.017 | 0.005 | 0.5 | 0.005 | 1.253 | 0.005 | 0.036 | 2.449 |
| 77 | 7 | 2 | 4 | 0.005 | 1.971 | 0.005 | 0.5 | 0.005 | 1.231 | 0.005 | 0.037 | 2.448 |
| 77 | 7 | 2 | 5 | 0.005 | 1.937 | 0.005 | 0.5 | 0.005 | 1.210 | 0.005 | 0.037 | 2.448 |
| 77 | 7 | 2 | 6 | 0.005 | 1.906 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.037 | 2.446 |
| 77 | 7 | 2 | 7 | 0.005 | 1.870 | 0.005 | 0.8 | 0.005 | 1.170 | 0.005 | 0.039 | 2.444 |
| 77 | 7 | 2 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 2 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 3 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 3 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 4 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 7 | 5 | 12 | 0.005 | 1.799 | 0.005 | 3.5 | 0.005 | 1.136 | 0.005 | 0.050 | 2.444 |
| 77 | 7 | 5 | 13 | 0.005 | 1.337 | 0.005 | 4.1 | 0.005 | 0.856 | 0.005 | 0.045 | 2.445 |
| 77 | 7 | 5 | 14 | 0.005 | 1.819 | 0.005 | 3.9 | 0.005 | 1.145 | 0.005 | 0.047 | 2.445 |
| 77 | 7 | 5 | 15 | 0.005 | 1.829 | 0.005 | 3.9 | 0.005 | 1.148 | 0.005 | 0.048 | 2.444 |
| 77 | 7 | 5 | 16 | 0.005 | 1.796 | 0.005 | 3.8 | 0.005 | 1.130 | 0.005 | 0.050 | 2.444 |
| 77 | 7 | 5 | 17 | 0.005 | 1.798 | 0.005 | 3.8 | 0.005 | 1.132 | 0.005 | 0.052 | 2.445 |
| 77 | 7 | 5 | 18 | 0.005 | 1.826 | 0.005 | 3.9 | 0.005 | 1.149 | 0.005 | 0.052 | 2.446 |
| 77 | 7 | 5 | 19 | 0.005 | 1.843 | 0.005 | 3.9 | 0.005 | 1.160 | 0.005 | 0.049 | 2.448 |
| 77 | 7 | 5 | 20 | 0.005 | 1.866 | 0.005 | 4.1 | 0.005 | 1.171 | 0.005 | 0.047 | 2.452 |
| 77 | 7 | 5 | 21 | 0.005 | 1.889 | 0.005 | 4.2 | 0.005 | 1.186 | 0.005 | 0.045 | 2.449 |
| 77 | 7 | 5 | 22 | 0.005 | 1.888 | 0.005 | 4.2 | 0.005 | 1.184 | 0.005 | 0.045 | 2.448 |
| 77 | 7 | 5 | 23 | 0.005 | 1.881 | 0.005 | 4.3 | 0.005 | 1.183 | 0.005 | 0.045 | 2.448 |
| 77 | 7 | 5 | 24 | 0.005 | 1.888 | 0.005 | 4.3 | 0.005 | 1.180 | 0.005 | 0.045 | 2.448 |
| 77 | 7 | 6 | 1 | 0.005 | 1.883 | 0.005 | 4.2 | 0.005 | 1.182 | 0.005 | 0.049 | 2.448 |
| 77 | 7 | 6 | 2 | 0.005 | 1.878 | 0.005 | 4.1 | 0.005 | 1.182 | 0.005 | 0.048 | 2.448 |
| 77 | 7 | 6 | 3 | 0.005 | 1.879 | 0.005 | 4.1 | 0.005 | 1.183 | 0.005 | 0.048 | 2.448 |
| 77 | 7 | 6 | 4 | 0.005 | 1.885 | 0.005 | 4.2 | 0.005 | 1.184 | 0.005 | 0.046 | 2.448 |
| 77 | 7 | 6 | 5 | 0.005 | 1.900 | 0.005 | 4.1 | 0.005 | 1.185 | 0.005 | 0.044 | 2.448 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 8 | 13 | 0.005 | 1.821 | 0.005 | 4.4 | 0.005 | 1.139 | 0.005 | 0.047 | 2.444 |
| 77 | 7 | 8 | 14 | 0.005 | 1.801 | 0.005 | 4.4 | 0.005 | 1.128 | 0.005 | 0.047 | 2.444 |
| 77 | 7 | 8 | 15 | 0.005 | 1.782 | 0.005 | 4.4 | 0.005 | 1.117 | 0.005 | 0.048 | 2.443 |
| 77 | 7 | 8 | 16 | 0.005 | 1.781 | 0.005 | 4.3 | 0.005 | 1.117 | 0.005 | 0.051 | 2.442 |
| 77 | 7 | 8 | 17 | 0.005 | 1.792 | 0.005 | 4.3 | 0.005 | 1.125 | 0.005 | 0.052 | 2.443 |
| 77 | 7 | 8 | 18 | 0.005 | 1.808 | 0.005 | 4.3 | 0.005 | 1.135 | 0.005 | 0.051 | 2.443 |
| 77 | 7 | 8 | 19 | 0.005 | 1.830 | 0.005 | 4.4 | 0.005 | 1.147 | 0.005 | 0.049 | 2.444 |
| 77 | 7 | 8 | 20 | 0.005 | 1.843 | 0.005 | 4.5 | 0.005 | 1.154 | 0.005 | 0.048 | 2.444 |
| 77 | 7 | 8 | 21 | 0.005 | 1.849 | 0.005 | 4.6 | 0.005 | 1.159 | 0.005 | 0.049 | 2.444 |
| 77 | 7 | 8 | 22 | 0.005 | 1.861 | 0.005 | 4.7 | 0.005 | 1.165 | 0.005 | 0.045 | 2.445 |
| 77 | 7 | 8 | 23 | 0.005 | 1.872 | 0.005 | 4.7 | 0.005 | 1.173 | 0.005 | 0.045 | 2.446 |
| 77 | 7 | 8 | 24 | 0.005 | 1.875 | 0.005 | 4.8 | 0.005 | 1.175 | 0.005 | 0.044 | 2.446 |
| 77 | 7 | 9 | 1 | 0.005 | 1.878 | 0.005 | 4.7 | 0.005 | 1.176 | 0.005 | 0.044 | 2.446 |
| 77 | 7 | 9 | 2 | 0.005 | 1.879 | 0.005 | 4.7 | 0.005 | 1.177 | 0.005 | 0.044 | 2.446 |
| 77 | 7 | 9 | 3 | 0.005 | 1.883 | 0.005 | 4.7 | 0.005 | 1.178 | 0.005 | 0.044 | 2.446 |
| 77 | 7 | 9 | 4 | 0.005 | 1.894 | 0.005 | 4.7 | 0.005 | 1.178 | 0.005 | 0.045 | 2.446 |
| 77 | 7 | 9 | 5 | 0.005 | 1.680 | 0.005 | 4.7 | 0.005 | 1.178 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 9 | 6 | 0.005 | 1.911 | 0.005 | 4.8 | 0.005 | 1.191 | 0.005 | 0.042 | 2.446 |
| 77 | 7 | 9 | 7 | 0.005 | 1.921 | 0.005 | 4.8 | 0.005 | 1.190 | 0.005 | 0.041 | 2.446 |
| 77 | 7 | 9 | 8 | 0.005 | 1.878 | 0.005 | 4.8 | 0.005 | 1.171 | 0.005 | 0.045 | 2.446 |
| 77 | 7 | 9 | 9 | 0.005 | 1.843 | 0.005 | 4.7 | 0.005 | 1.152 | 0.005 | 0.046 | 2.445 |
| 77 | 7 | 9 | 10 | 0.005 | 1.827 | 0.005 | 4.6 | 0.005 | 1.142 | 0.005 | 0.049 | 2.445 |
| 77 | 7 | 9 | 11 | 0.005 | 1.809 | 0.005 | 4.6 | 0.005 | 1.133 | 0.005 | 0.051 | 2.445 |
| 77 | 7 | 9 | 12 | 0.005 | 1.801 | 0.005 | 4.6 | 0.005 | 1.126 | 0.005 | 0.053 | 2.443 |
| 77 | 7 | 9 | 13 | 0.005 | 1.793 | 0.005 | 4.6 | 0.005 | 1.122 | 0.005 | 0.053 | 2.443 |
| 77 | 7 | 9 | 14 | 0.005 | 1.784 | 0.005 | 4.5 | 0.005 | 1.120 | 0.005 | 0.054 | 2.443 |
| 77 | 7 | 9 | 15 | 0.005 | 1.783 | 0.005 | 4.5 | 0.005 | 1.118 | 0.005 | 0.055 | 2.444 |
| 77 | 7 | 9 | 16 | 0.005 | 1.787 | 0.005 | 4.5 | 0.005 | 1.119 | 0.005 | 0.052 | 2.444 |
| 77 | 7 | 9 | 17 | 0.005 | 1.786 | 0.005 | 4.5 | 0.005 | 1.118 | 0.005 | 0.050 | 2.444 |
| 77 | 7 | 9 | 18 | 0.005 | 1.791 | 0.005 | 4.5 | 0.005 | 1.122 | 0.005 | 0.051 | 2.444 |
| 77 | 7 | 9 | 19 | 0.005 | 1.806 | 0.005 | 4.6 | 0.005 | 1.130 | 0.005 | 0.053 | 2.444 |
| 77 | 7 | 9 | 20 | 0.005 | 1.826 | 0.005 | 4.6 | 0.005 | 1.144 | 0.005 | 0.051 | 2.445 |
| 77 | 7 | 9 | 21 | 0.005 | 1.863 | 0.005 | 4.7 | 0.005 | 1.169 | 0.005 | 0.050 | 2.445 |
| 77 | 7 | 9 | 22 | 0.005 | 1.857 | 0.005 | 4.8 | 0.005 | 1.165 | 0.005 | 0.049 | 2.446 |
| 77 | 7 | 9 | 23 | 0.005 | 1.867 | 0.005 | 4.9 | 0.005 | 1.172 | 0.005 | 0.049 | 2.446 |
| 77 | 7 | 9 | 24 | 0.005 | 1.884 | 0.005 | 5.0 | 0.005 | 1.180 | 0.005 | 0.049 | 2.446 |
| 77 | 7 | 10 | 1 | 0.005 | 1.888 | 0.005 | 5.0 | 0.005 | 1.182 | 0.005 | 0.048 | 2.446 |
| 77 | 7 | 10 | 2 | 0.005 | 1.889 | 0.005 | 5.0 | 0.005 | 1.183 | 0.005 | 0.049 | 2.446 |
| 77 | 7 | 10 | 3 | 0.005 | 1.891 | 0.005 | 5.1 | 0.005 | 1.185 | 0.005 | 0.050 | 2.446 |
| 77 | 7 | 10 | 4 | 0.005 | 1.898 | 0.005 | 5.0 | 0.005 | 1.188 | 0.005 | 0.051 | 2.446 |
| 77 | 7 | 10 | 5 | 0.005 | 1.900 | 0.005 | 5.1 | 0.005 | 1.189 | 0.005 | 0.046 | 2.446 |
| 77 | 7 | 10 | 6 | 0.005 | 1.905 | 0.005 | 5.0 | 0.005 | 1.192 | 0.005 | 0.046 | 2.446 |
| 77 | 7 | 10 | 7 | 0.005 | 1.907 | 0.005 | 5.0 | 0.005 | 1.193 | 0.005 | 0.053 | 2.446 |
| 77 | 7 | 10 | 8 | 0.005 | 1.890 | 0.005 | 4.9 | 0.005 | 1.183 | 0.005 | 0.061 | 2.445 |
| 77 | 7 | 10 | 9 | 0.005 | 1.867 | 0.005 | 4.9 | 0.005 | 1.170 | 0.005 | 0.062 | 2.445 |
| 77 | 7 | 10 | 10 | 0.005 | 1.843 | 0.005 | 4.8 | 0.005 | 1.158 | 0.005 | 0.062 | 2.444 |
| 77 | 7 | 10 | 11 | 0.005 | 1.832 | 0.005 | 4.8 | 0.005 | 1.150 | 0.005 | 0.060 | 2.446 |
| 77 | 7 | 10 | 12 | 0.005 | 1.828 | 0.005 | 4.8 | 0.005 | 1.146 | 0.005 | 0.060 | 2.445 |
| 77 | 7 | 10 | 13 | 0.005 | 1.810 | 0.005 | 4.8 | 0.005 | 1.138 | 0.005 | 0.060 | 2.445 |
| 77 | 7 | 10 | 14 | 0.005 | 1.797 | 0.005 | 4.8 | 0.005 | 1.132 | 0.005 | 0.061 | 2.445 |
| 77 | 7 | 10 | 15 | 0.005 | 1.801 | 0.005 | 4.8 | 0.005 | 1.130 | 0.005 | 0.064 | 2.443 |
| 77 | 7 | 10 | 16 | 0.005 | 1.797 | 0.005 | 4.9 | 0.005 | 1.131 | 0.005 | 0.066 | 2.443 |
| 77 | 7 | 10 | 17 | 0.005 | 1.803 | 0.005 | 4.8 | 0.005 | 1.134 | 0.005 | 0.066 | 2.443 |
| 77 | 7 | 10 | 18 | 0.005 | 1.810 | 0.005 | 4.9 | 0.005 | 1.138 | 0.005 | 0.067 | 2.443 |
| 77 | 7 | 10 | 19 | 0.005 | 1.837 | 0.005 | 5.0 | 0.005 | 1.153 | 0.005 | 0.064 | 2.443 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 6 | 6 | 0.005 | 1.893 | 0.005 | 4.2 | 0.005 | 1.183 | 0.005 | 0.042 | 2.448 |
| 77 | 7 | 6 | 7 | 0.005 | 1.889 | 0.005 | 4.3 | 0.005 | 1.178 | 0.005 | 0.042 | 2.448 |
| 77 | 7 | 6 | 8 | 0.005 | 1.858 | 0.005 | 4.2 | 0.005 | 1.162 | 0.005 | 0.048 | 2.448 |
| 77 | 7 | 6 | 9 | 0.005 | 1.833 | 0.005 | 4.1 | 0.005 | 1.149 | 0.005 | 0.051 | 2.447 |
| 77 | 7 | 6 | 10 | 0.005 | 1.822 | 0.005 | 4.0 | 0.005 | 1.142 | 0.005 | 0.057 | 2.447 |
| 77 | 7 | 6 | 11 | 0.005 | 1.813 | 0.005 | 4.0 | 0.005 | 1.135 | 0.005 | 0.057 | 2.447 |
| 77 | 7 | 6 | 12 | 0.005 | 1.841 | 0.005 | 3.9 | 0.005 | 1.144 | 0.005 | 0.057 | 2.447 |
| 77 | 7 | 6 | 13 | 0.005 | 1.828 | 0.005 | 4.0 | 0.005 | 1.144 | 0.005 | 0.056 | 2.447 |
| 77 | 7 | 6 | 14 | 0.005 | 1.826 | 0.005 | 4.0 | 0.005 | 1.144 | 0.005 | 0.054 | 2.447 |
| 77 | 7 | 6 | 15 | 0.005 | 1.833 | 0.005 | 4.0 | 0.005 | 1.150 | 0.005 | 0.053 | 2.447 |
| 77 | 7 | 6 | 16 | 0.005 | 1.824 | 0.005 | 4.1 | 0.005 | 1.144 | 0.005 | 0.054 | 2.447 |
| 77 | 7 | 6 | 17 | 0.005 | 1.811 | 0.005 | 4.1 | 0.005 | 1.137 | 0.005 | 0.053 | 2.447 |
| 77 | 7 | 6 | 18 | 0.005 | 1.811 | 0.005 | 4.0 | 0.005 | 1.137 | 0.005 | 0.052 | 2.446 |
| 77 | 7 | 6 | 19 | 0.005 | 1.815 | 0.005 | 4.0 | 0.005 | 1.138 | 0.005 | 0.050 | 2.446 |
| 77 | 7 | 6 | 20 | 0.005 | 1.825 | 0.005 | 4.1 | 0.005 | 1.146 | 0.005 | 0.047 | 2.447 |
| 77 | 7 | 6 | 21 | 0.005 | 1.846 | 0.005 | 4.1 | 0.005 | 1.158 | 0.005 | 0.049 | 2.447 |
| 77 | 7 | 6 | 22 | 0.005 | 1.869 | 0.005 | 4.1 | 0.005 | 1.172 | 0.005 | 0.049 | 2.450 |
| 77 | 7 | 6 | 23 | 0.005 | 1.884 | 0.005 | 4.2 | 0.005 | 1.180 | 0.005 | 0.050 | 2.450 |
| 77 | 7 | 6 | 24 | 0.005 | 1.890 | 0.005 | 4.2 | 0.005 | 1.184 | 0.005 | 0.051 | 2.448 |
| 77 | 7 | 7 | 1 | 0.005 | 1.896 | 0.005 | 4.2 | 0.005 | 1.185 | 0.005 | 0.048 | 2.448 |
| 77 | 7 | 7 | 2 | 0.005 | 1.907 | 0.005 | 4.2 | 0.005 | 1.189 | 0.005 | 0.046 | 2.448 |
| 77 | 7 | 7 | 3 | 0.005 | 1.922 | 0.005 | 4.2 | 0.005 | 1.199 | 0.005 | 0.052 | 2.448 |
| 77 | 7 | 7 | 4 | 0.005 | 1.925 | 0.005 | 4.3 | 0.005 | 1.202 | 0.005 | 0.052 | 2.448 |
| 77 | 7 | 7 | 5 | 0.005 | 1.936 | 0.005 | 4.3 | 0.005 | 1.205 | 0.005 | 0.055 | 2.448 |
| 77 | 7 | 7 | 6 | 0.005 | 1.947 | 0.005 | 4.3 | 0.005 | 1.209 | 0.005 | 0.052 | 2.448 |
| 77 | 7 | 7 | 7 | 0.005 | 1.948 | 0.005 | 4.4 | 0.005 | 1.207 | 0.005 | 0.056 | 2.448 |
| 77 | 7 | 7 | 8 | 0.005 | 1.920 | 0.005 | 4.4 | 0.005 | 1.194 | 0.005 | 0.056 | 2.447 |
| 77 | 7 | 7 | 9 | 0.005 | 1.886 | 0.005 | 4.3 | 0.005 | 1.173 | 0.005 | 0.057 | 2.446 |
| 77 | 7 | 7 | 10 | 0.005 | 1.836 | 0.005 | 4.2 | 0.005 | 1.146 | 0.005 | 0.055 | 2.446 |
| 77 | 7 | 7 | 11 | 0.005 | 1.826 | 0.005 | 4.2 | 0.005 | 1.137 | 0.005 | 0.054 | 2.446 |
| 77 | 7 | 7 | 12 | 0.005 | 1.817 | 0.005 | 4.1 | 0.005 | 1.136 | 0.005 | 0.056 | 2.445 |
| 77 | 7 | 7 | 13 | 0.005 | 1.803 | 0.005 | 4.1 | 0.005 | 1.130 | 0.005 | 0.053 | 2.446 |
| 77 | 7 | 7 | 14 | 0.005 | 1.793 | 0.005 | 4.1 | 0.005 | 1.129 | 0.005 | 0.051 | 2.445 |
| 77 | 7 | 7 | 15 | 0.005 | 1.806 | 0.005 | 4.1 | 0.005 | 1.131 | 0.005 | 0.050 | 2.445 |
| 77 | 7 | 7 | 16 | 0.005 | 1.800 | 0.005 | 4.2 | 0.005 | 1.129 | 0.005 | 0.051 | 2.444 |
| 77 | 7 | 7 | 17 | 0.005 | 1.785 | 0.005 | 4.2 | 0.005 | 1.121 | 0.005 | 0.052 | 2.443 |
| 77 | 7 | 7 | 18 | 0.005 | 1.792 | 0.005 | 4.1 | 0.005 | 1.126 | 0.005 | 0.051 | 2.443 |
| 77 | 7 | 7 | 19 | 0.005 | 1.818 | 0.005 | 4.1 | 0.005 | 1.140 | 0.005 | 0.050 | 2.444 |
| 77 | 7 | 7 | 20 | 0.005 | 1.835 | 0.005 | 4.2 | 0.005 | 1.155 | 0.005 | 0.049 | 2.445 |
| 77 | 7 | 7 | 21 | 0.005 | 1.869 | 0.005 | 4.2 | 0.005 | 1.170 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 7 | 22 | 0.005 | 1.901 | 0.005 | 4.3 | 0.005 | 1.191 | 0.005 | 0.048 | 2.446 |
| 77 | 7 | 7 | 23 | 0.005 | 1.915 | 0.005 | 4.5 | 0.005 | 1.199 | 0.005 | 0.049 | 2.446 |
| 77 | 7 | 7 | 24 | 0.005 | 1.918 | 0.005 | 4.5 | 0.005 | 1.199 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 8 | 1 | 0.005 | 1.927 | 0.005 | 4.6 | 0.005 | 1.204 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 8 | 2 | 0.005 | 1.921 | 0.005 | 4.4 | 0.005 | 1.200 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 8 | 3 | 0.005 | 1.919 | 0.005 | 4.5 | 0.005 | 1.199 | 0.005 | 0.048 | 2.446 |
| 77 | 7 | 8 | 4 | 0.005 | 1.920 | 0.005 | 4.4 | 0.005 | 1.198 | 0.005 | 0.048 | 2.446 |
| 77 | 7 | 8 | 5 | 0.005 | 1.922 | 0.005 | 4.5 | 0.005 | 1.203 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 8 | 6 | 0.005 | 1.927 | 0.005 | 4.6 | 0.005 | 1.201 | 0.005 | 0.046 | 2.446 |
| 77 | 7 | 8 | 7 | 0.005 | 1.916 | 0.005 | 4.5 | 0.005 | 1.195 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 8 | 8 | 0.005 | 1.893 | 0.005 | 4.5 | 0.005 | 1.179 | 0.005 | 0.043 | 2.445 |
| 77 | 7 | 8 | 9 | 0.005 | 1.861 | 0.005 | 4.4 | 0.005 | 1.162 | 0.005 | 0.045 | 2.445 |
| 77 | 7 | 8 | 10 | 0.005 | 1.849 | 0.005 | 4.4 | 0.005 | 1.152 | 0.005 | 0.047 | 2.444 |
| 77 | 7 | 8 | 11 | 0.005 | 1.830 | 0.005 | 4.3 | 0.005 | 1.142 | 0.005 | 0.048 | 2.444 |
| 77 | 7 | 8 | 12 | 0.005 | 1.832 | 0.005 | 4.4 | 0.005 | 1.143 | 0.005 | 0.047 | 2.444 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 10 | 20 | 0.005 | 1.859 | 0.005 | 5.0 | 0.005 | 1.165 | 0.005 | 0.061 | 2.444 |
| 77 | 7 | 10 | 21 | 0.005 | 1.883 | 0.005 | 5.1 | 0.005 | 1.181 | 0.005 | 0.058 | 2.445 |
| 77 | 7 | 10 | 22 | 0.005 | 1.910 | 0.005 | 5.2 | 0.005 | 1.194 | 0.005 | 0.058 | 2.446 |
| 77 | 7 | 10 | 23 | 0.005 | 1.920 | 0.005 | 5.3 | 0.005 | 1.203 | 0.005 | 0.061 | 2.447 |
| 77 | 7 | 10 | 24 | 0.005 | 1.943 | 0.005 | 5.4 | 0.005 | 1.211 | 0.005 | 0.060 | 2.446 |
| 77 | 7 | 11 | 1 | 0.005 | 1.939 | 0.005 | 5.4 | 0.005 | 1.213 | 0.005 | 0.062 | 2.446 |
| 77 | 7 | 11 | 2 | 0.005 | 1.936 | 0.005 | 5.4 | 0.005 | 1.211 | 0.005 | 0.063 | 2.446 |
| 77 | 7 | 11 | 3 | 0.005 | 1.927 | 0.005 | 5.3 | 0.005 | 1.207 | 0.005 | 0.065 | 2.446 |
| 77 | 7 | 11 | 4 | 0.005 | 1.925 | 0.005 | 5.3 | 0.005 | 1.208 | 0.005 | 0.065 | 2.446 |
| 77 | 7 | 11 | 5 | 0.005 | 1.931 | 0.005 | 5.4 | 0.005 | 1.208 | 0.005 | 0.060 | 2.447 |
| 77 | 7 | 11 | 6 | 0.005 | 1.950 | 0.005 | 5.3 | 0.005 | 1.215 | 0.005 | 0.058 | 2.447 |
| 77 | 7 | 11 | 7 | 0.005 | 1.218 | 0.005 | 5.9 | 0.005 | 0.879 | 0.005 | 0.059 | 2.447 |
| 77 | 7 | 11 | 8 | 0.005 | 1.882 | 0.005 | 5.3 | 0.005 | 1.186 | 0.005 | 0.048 | 2.446 |
| 77 | 7 | 11 | 9 | 0.005 | 1.872 | 0.005 | 5.1 | 0.005 | 1.175 | 0.005 | 0.063 | 2.445 |
| 77 | 7 | 11 | 10 | 0.005 | 1.864 | 0.005 | 5.1 | 0.005 | 1.166 | 0.005 | 0.066 | 2.444 |
| 77 | 7 | 11 | 11 | 0.005 | 1.859 | 0.005 | 5.1 | 0.005 | 1.156 | 0.005 | 0.066 | 2.444 |
| 77 | 7 | 11 | 12 | 0.005 | 1.847 | 0.005 | 5.1 | 0.005 | 1.151 | 0.005 | 0.068 | 2.445 |
| 77 | 7 | 11 | 13 | 0.005 | 1.823 | 0.275 | 5.1 | 0.005 | 1.138 | 0.005 | 0.067 | 2.444 |
| 77 | 7 | 11 | 14 | 0.005 | 1.898 | 0.372 | 5.1 | 0.005 | 1.127 | 0.005 | 0.067 | 2.443 |
| 77 | 7 | 11 | 15 | 0.005 | 1.830 | 0.042 | 5.0 | 0.005 | 1.122 | 0.005 | 0.066 | 2.443 |
| 77 | 7 | 11 | 16 | 0.005 | 2.050 | 0.026 | 5.0 | 0.005 | 1.120 | 0.005 | 0.065 | 2.443 |
| 77 | 7 | 11 | 17 | 0.005 | 1.788 | 0.015 | 5.1 | 0.005 | 1.120 | 0.005 | 0.065 | 2.443 |
| 77 | 7 | 11 | 18 | 0.005 | 1.801 | 0.005 | 5.1 | 0.005 | 1.128 | 0.005 | 0.066 | 2.443 |
| 77 | 7 | 11 | 19 | 0.005 | 1.820 | 0.005 | 5.2 | 0.005 | 1.141 | 0.005 | 0.063 | 2.443 |
| 77 | 7 | 11 | 20 | 0.005 | 1.843 | 0.005 | 5.3 | 0.005 | 1.156 | 0.005 | 0.059 | 2.444 |
| 77 | 7 | 11 | 21 | 0.005 | 1.860 | 0.005 | 5.4 | 0.005 | 1.168 | 0.005 | 0.055 | 2.444 |
| 77 | 7 | 11 | 22 | 0.005 | 1.878 | 0.005 | 5.4 | 0.005 | 1.178 | 0.005 | 0.053 | 2.445 |
| 77 | 7 | 11 | 23 | 0.005 | 1.907 | 0.005 | 5.5 | 0.005 | 1.193 | 0.005 | 0.053 | 2.445 |
| 77 | 7 | 11 | 24 | 0.005 | 1.932 | 0.005 | 5.5 | 0.005 | 1.206 | 0.005 | 0.052 | 2.446 |
| 77 | 7 | 12 | 1 | 0.005 | 1.939 | 0.005 | 5.6 | 0.005 | 1.209 | 0.005 | 0.055 | 2.446 |
| 77 | 7 | 12 | 2 | 0.005 | 1.934 | 0.005 | 5.6 | 0.005 | 1.209 | 0.005 | 0.055 | 2.446 |
| 77 | 7 | 12 | 3 | 0.005 | 1.927 | 0.005 | 5.6 | 0.005 | 1.203 | 0.005 | 0.055 | 2.446 |
| 77 | 7 | 12 | 4 | 0.005 | 1.918 | 0.005 | 5.6 | 0.005 | 1.201 | 0.005 | 0.057 | 2.446 |
| 77 | 7 | 12 | 5 | 0.005 | 1.925 | 0.005 | 5.6 | 0.005 | 1.204 | 0.005 | 0.058 | 2.446 |
| 77 | 7 | 12 | 6 | 0.005 | 1.929 | 0.005 | 5.5 | 0.005 | 1.204 | 0.005 | 0.055 | 2.446 |
| 77 | 7 | 12 | 7 | 0.005 | 1.932 | 0.005 | 5.5 | 0.005 | 1.200 | 0.005 | 0.054 | 2.446 |
| 77 | 7 | 12 | 8 | 0.005 | 1.875 | 0.005 | 5.5 | 0.005 | 1.171 | 0.005 | 0.054 | 2.446 |
| 77 | 7 | 12 | 9 | 0.005 | 1.845 | 0.005 | 5.4 | 0.005 | 1.159 | 0.005 | 0.054 | 2.444 |
| 77 | 7 | 12 | 10 | 0.005 | 1.827 | 0.005 | 5.4 | 0.005 | 1.148 | 0.005 | 0.056 | 2.444 |
| 77 | 7 | 12 | 11 | 0.005 | 1.802 | 0.005 | 5.3 | 0.005 | 1.133 | 0.005 | 0.057 | 2.445 |
| 77 | 7 | 12 | 12 | 0.005 | 1.791 | 0.005 | 5.3 | 0.005 | 1.126 | 0.005 | 0.059 | 2.444 |
| 77 | 7 | 12 | 13 | 0.005 | 1.782 | 0.005 | 5.3 | 0.005 | 1.122 | 0.005 | 0.058 | 2.443 |
| 77 | 7 | 12 | 14 | 0.005 | 1.775 | 0.005 | 5.3 | 0.005 | 1.116 | 0.005 | 0.058 | 2.443 |
| 77 | 7 | 12 | 15 | 0.005 | 1.767 | 0.005 | 5.3 | 0.005 | 1.114 | 0.005 | 0.057 | 2.443 |
| 77 | 7 | 12 | 16 | 0.005 | 1.760 | 0.005 | 5.3 | 0.005 | 1.109 | 0.005 | 0.054 | 2.443 |
| 77 | 7 | 12 | 17 | 0.005 | 1.754 | 0.005 | 5.3 | 0.005 | 1.106 | 0.005 | 0.053 | 2.442 |
| 77 | 7 | 12 | 18 | 0.005 | 1.761 | 0.005 | 5.3 | 0.005 | 1.110 | 0.005 | 0.052 | 2.442 |
| 77 | 7 | 12 | 19 | 0.005 | 1.777 | 0.005 | 5.4 | 0.005 | 1.120 | 0.005 | 0.050 | 2.443 |
| 77 | 7 | 12 | 20 | 0.005 | 1.806 | 0.005 | 5.5 | 0.005 | 1.137 | 0.005 | 0.049 | 2.444 |
| 77 | 7 | 12 | 21 | 0.005 | 1.832 | 0.005 | 5.5 | 0.005 | 1.152 | 0.005 | 0.051 | 2.444 |
| 77 | 7 | 12 | 22 | 0.005 | 1.834 | 0.005 | 5.6 | 0.005 | 1.154 | 0.005 | 0.051 | 2.444 |
| 77 | 7 | 12 | 23 | 0.005 | 1.843 | 0.005 | 5.6 | 0.005 | 1.160 | 0.005 | 0.049 | 2.444 |
| 77 | 7 | 12 | 24 | 0.005 | 1.851 | 0.005 | 5.7 | 0.005 | 1.165 | 0.005 | 0.049 | 2.445 |
| 77 | 7 | 13 | 1 | 0.005 | 1.860 | 0.005 | 5.7 | 0.005 | 1.168 | 0.005 | 0.047 | 2.445 |
| 77 | 7 | 13 | 2 | 0.005 | 1.865 | 0.005 | 5.7 | 0.005 | 1.170 | 0.005 | 0.048 | 2.445 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 13 | 3 | 0.005 | 1.859 | 0.005 | 5.7 | 0.005 | 1.167 | 0.005 | 0.050 | 2.445 |
| 77 | 7 | 13 | 4 | 0.005 | 1.854 | 0.005 | 5.8 | 0.005 | 1.165 | 0.005 | 0.049 | 2.445 |
| 77 | 7 | 13 | 5 | 0.005 | 1.865 | 0.005 | 5.8 | 0.005 | 1.170 | 0.005 | 0.046 | 2.445 |
| 77 | 7 | 13 | 6 | 0.005 | 1.863 | 0.005 | 5.8 | 0.005 | 1.168 | 0.005 | 0.043 | 2.446 |
| 77 | 7 | 13 | 7 | 0.005 | 1.850 | 0.005 | 5.8 | 0.005 | 1.164 | 0.005 | 0.043 | 2.446 |
| 77 | 7 | 13 | 8 | 0.005 | 1.843 | 0.005 | 5.8 | 0.005 | 1.158 | 0.005 | 0.044 | 2.446 |
| 77 | 7 | 13 | 9 | 0.005 | 1.833 | 0.005 | 5.7 | 0.005 | 1.153 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 13 | 10 | 0.005 | 1.820 | 0.005 | 5.7 | 0.005 | 1.142 | 0.005 | 0.051 | 2.446 |
| 77 | 7 | 13 | 11 | 0.005 | 1.800 | 0.005 | 5.6 | 0.005 | 1.130 | 0.005 | 0.054 | 2.445 |
| 77 | 7 | 13 | 12 | 0.005 | 1.796 | 0.005 | 5.6 | 0.005 | 1.126 | 0.005 | 0.056 | 2.444 |
| 77 | 7 | 13 | 13 | 0.005 | 1.788 | 0.005 | 5.5 | 0.005 | 1.119 | 0.005 | 0.056 | 2.444 |
| 77 | 7 | 13 | 14 | 0.023 | 1.316 | 0.005 | 5.7 | 0.005 | 0.856 | 0.005 | 0.056 | 2.444 |
| 77 | 7 | 13 | 15 | 0.005 | 1.739 | 0.005 | 5.6 | 0.005 | 1.092 | 0.005 | 0.059 | 2.443 |
| 77 | 7 | 13 | 16 | 0.005 | 1.756 | 0.005 | 5.6 | 0.005 | 1.105 | 0.005 | 0.059 | 2.443 |
| 77 | 7 | 13 | 17 | 0.005 | 1.772 | 0.005 | 5.6 | 0.005 | 1.113 | 0.005 | 0.059 | 2.444 |
| 77 | 7 | 13 | 18 | 0.005 | 1.797 | 0.005 | 5.7 | 0.005 | 1.129 | 0.005 | 0.057 | 2.445 |
| 77 | 7 | 13 | 19 | 0.005 | 1.822 | 0.005 | 5.8 | 0.005 | 1.146 | 0.005 | 0.058 | 2.446 |
| 77 | 7 | 13 | 20 | 0.005 | 1.832 | 0.005 | 5.9 | 0.005 | 1.153 | 0.005 | 0.057 | 2.446 |
| 77 | 7 | 13 | 21 | 0.005 | 1.838 | 0.005 | 5.9 | 0.005 | 1.155 | 0.005 | 0.053 | 2.447 |
| 77 | 7 | 13 | 22 | 0.005 | 1.831 | 0.005 | 5.9 | 0.005 | 1.150 | 0.005 | 0.048 | 2.447 |
| 77 | 7 | 13 | 23 | 0.005 | 1.826 | 0.005 | 5.9 | 0.005 | 1.145 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 13 | 24 | 0.005 | 1.823 | 0.005 | 5.8 | 0.005 | 1.144 | 0.005 | 0.045 | 2.445 |
| 77 | 7 | 14 | 1 | 0.005 | 1.843 | 0.005 | 5.8 | 0.005 | 1.157 | 0.005 | 0.044 | 2.446 |
| 77 | 7 | 14 | 2 | 0.005 | 1.878 | 0.005 | 5.9 | 0.005 | 1.180 | 0.005 | 0.046 | 2.446 |
| 77 | 7 | 14 | 3 | 0.005 | 1.861 | 0.005 | 5.9 | 0.005 | 1.169 | 0.005 | 0.045 | 2.446 |
| 77 | 7 | 14 | 4 | 0.005 | 1.834 | 0.005 | 5.9 | 0.005 | 1.150 | 0.005 | 0.049 | 2.446 |
| 77 | 7 | 14 | 5 | 0.005 | 1.832 | 0.005 | 5.9 | 0.005 | 1.149 | 0.005 | 0.051 | 2.446 |
| 77 | 7 | 14 | 6 | 0.005 | 1.840 | 0.005 | 5.9 | 0.005 | 1.154 | 0.005 | 0.047 | 2.446 |
| 77 | 7 | 14 | 7 | 0.005 | 1.844 | 0.005 | 5.9 | 0.005 | 1.145 | 0.005 | 0.048 | 2.446 |
| 77 | 7 | 14 | 8 | 0.005 | 1.806 | 0.005 | 5.9 | 0.005 | 1.131 | 0.005 | 0.049 | 2.445 |
| 77 | 7 | 14 | 9 | 0.005 | 1.759 | 0.005 | 5.7 | 0.005 | 1.109 | 0.005 | 0.055 | 2.445 |
| 77 | 7 | 14 | 10 | 0.005 | 1.730 | 0.005 | 5.6 | 0.005 | 1.091 | 0.005 | 0.058 | 2.445 |
| 77 | 7 | 14 | 11 | 0.005 | 1.705 | 0.005 | 5.3 | 0.005 | 1.076 | 0.005 | 0.061 | 2.444 |
| 77 | 7 | 14 | 12 | 0.005 | 1.716 | 0.005 | 4.6 | 0.005 | 1.066 | 0.005 | 0.063 | 2.452 |
| 77 | 7 | 14 | 13 | 0.005 | 1.693 | 0.005 | 3.9 | 0.005 | 1.069 | 0.005 | 0.064 | 2.453 |
| 77 | 7 | 14 | 14 | 0.005 | 1.739 | 0.005 | 3.2 | 0.005 | 1.064 | 0.005 | 0.065 | 2.454 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 25 | 13 | 0.005 | 1.119 | 0.120 | 1.1 | 0.005 | 1.185 | 0.005 | 0.052 | 2.455 |
| 77 | 7 | 25 | 14 | 0.005 | 1.590 | 0.084 | 1.2 | 0.005 | 1.164 | 0.005 | 0.053 | 2.455 |
| 77 | 7 | 25 | 15 | 0.005 | 1.886 | 0.011 | 1.2 | 0.005 | 1.179 | 0.005 | 0.053 | 2.455 |
| 77 | 7 | 25 | 16 | 0.005 | 1.898 | 0.005 | 1.3 | 0.005 | 1.184 | 0.005 | 0.053 | 2.455 |
| 77 | 7 | 25 | 17 | 0.005 | 1.875 | 0.005 | 1.2 | 0.005 | 1.178 | 0.005 | 0.050 | 2.454 |
| 77 | 7 | 25 | 18 | 0.005 | 1.878 | 0.005 | 1.2 | 0.005 | 1.180 | 0.005 | 0.049 | 2.455 |
| 77 | 7 | 25 | 19 | 0.005 | 1.885 | 0.005 | 1.2 | 0.005 | 1.183 | 0.005 | 0.045 | 2.454 |
| 77 | 7 | 25 | 20 | 0.005 | 1.891 | 0.005 | 1.0 | 0.005 | 1.197 | 0.005 | 0.042 | 2.454 |
| 77 | 7 | 25 | 21 | 0.005 | 1.904 | 0.005 | 1.0 | 0.005 | 1.205 | 0.005 | 0.043 | 2.455 |
| 77 | 7 | 25 | 22 | 0.005 | 1.918 | 0.005 | 1.1 | 0.005 | 1.208 | 0.005 | 0.047 | 2.456 |
| 77 | 7 | 25 | 23 | 0.005 | 1.920 | 0.005 | 1.1 | 0.005 | 1.210 | 0.005 | 0.048 | 2.455 |
| 77 | 7 | 25 | 24 | 0.005 | 1.928 | 0.005 | 1.0 | 0.005 | 1.211 | 0.005 | 0.051 | 2.455 |
| 77 | 7 | 26 | 1 | 0.005 | 1.929 | 0.005 | 0.9 | 0.005 | 1.215 | 0.005 | 0.050 | 2.454 |
| 77 | 7 | 26 | 2 | 0.005 | 1.930 | 0.005 | 0.9 | 0.005 | 1.213 | 0.005 | 0.049 | 2.453 |
| 77 | 7 | 26 | 3 | 0.005 | 1.925 | 0.005 | 0.8 | 0.005 | 1.211 | 0.005 | 0.050 | 2.453 |
| 77 | 7 | 26 | 4 | 0.005 | 1.915 | 0.005 | 0.9 | 0.005 | 1.207 | 0.005 | 0.052 | 2.454 |
| 77 | 7 | 26 | 5 | 0.005 | 1.917 | 0.005 | 0.8 | 0.005 | 1.207 | 0.005 | 0.048 | 2.454 |
| 77 | 7 | 26 | 6 | 0.005 | 1.925 | 0.005 | 0.8 | 0.005 | 1.210 | 0.005 | 0.045 | 2.454 |
| 77 | 7 | 26 | 7 | 0.005 | 1.941 | 0.005 | 0.7 | 0.005 | 1.208 | 0.005 | 0.044 | 2.454 |
| 77 | 7 | 26 | 8 | 0.005 | 1.925 | 0.005 | 0.7 | 0.005 | 1.204 | 0.005 | 0.045 | 2.454 |
| 77 | 7 | 26 | 9 | 0.005 | 1.905 | 0.005 | 0.9 | 0.005 | 1.198 | 0.005 | 0.050 | 2.455 |
| 77 | 7 | 26 | 10 | 0.005 | 1.924 | 0.005 | 1.0 | 0.005 | 1.182 | 0.005 | 0.054 | 2.454 |
| 77 | 7 | 26 | 11 | 0.005 | 1.864 | 0.005 | 0.9 | 0.005 | 1.173 | 0.005 | 0.051 | 2.453 |
| 77 | 7 | 26 | 12 | 0.005 | 1.853 | 0.005 | 1.0 | 0.005 | 1.170 | 0.005 | 0.049 | 2.453 |
| 77 | 7 | 26 | 13 | 0.005 | 1.865 | 0.005 | 1.2 | 0.005 | 1.180 | 0.005 | 0.051 | 2.453 |
| 77 | 7 | 26 | 14 | 0.005 | 1.864 | 0.005 | 1.1 | 0.005 | 1.173 | 0.005 | 0.052 | 2.453 |
| 77 | 7 | 26 | 15 | 0.005 | 1.848 | 0.005 | 1.0 | 0.005 | 1.165 | 0.005 | 0.052 | 2.453 |
| 77 | 7 | 26 | 16 | 0.005 | 1.854 | 0.005 | 1.1 | 0.005 | 1.171 | 0.005 | 0.054 | 2.453 |
| 77 | 7 | 26 | 17 | 0.005 | 1.857 | 0.005 | 1.0 | 0.005 | 1.173 | 0.005 | 0.055 | 2.454 |
| 77 | 7 | 26 | 18 | 0.005 | 1.869 | 0.005 | 1.0 | 0.005 | 1.187 | 0.005 | 0.055 | 2.454 |
| 77 | 7 | 26 | 19 | 0.005 | 1.892 | 0.005 | 0.9 | 0.005 | 1.193 | 0.005 | 0.051 | 2.454 |
| 77 | 7 | 26 | 20 | 0.005 | 1.956 | 0.005 | 0.9 | 0.005 | 1.217 | 0.005 | 0.047 | 2.455 |
| 77 | 7 | 26 | 21 | 0.005 | 1.959 | 0.005 | 0.7 | 0.005 | 1.224 | 0.005 | 0.047 | 2.455 |
| 77 | 7 | 26 | 22 | 0.005 | 1.940 | 0.005 | 0.7 | 0.005 | 1.221 | 0.005 | 0.050 | 2.455 |
| 77 | 7 | 26 | 23 | 0.005 | 1.949 | 0.005 | 0.8 | 0.005 | 1.223 | 0.005 | 0.049 | 2.454 |
| 77 | 7 | 26 | 24 | 0.005 | 1.938 | 0.005 | 0.9 | 0.005 | 1.218 | 0.005 | 0.048 | 2.454 |
| 77 | 7 | 27 | 1 | 0.005 | 1.931 | 0.005 | 0.8 | 0.005 | 1.216 | 0.005 | 0.048 | 2.454 |
| 77 | 7 | 27 | 2 | 0.005 | 1.933 | 0.005 | 0.8 | 0.005 | 1.215 | 0.005 | 0.047 | 2.454 |
| 77 | 7 | 27 | 3 | 0.005 | 1.933 | 0.005 | 0.8 | 0.005 | 1.215 | 0.005 | 0.046 | 2.455 |
| 77 | 7 | 27 | 4 | 0.005 | 1.928 | 0.005 | 0.7 | 0.005 | 1.212 | 0.005 | 0.045 | 2.455 |
| 77 | 7 | 27 | 5 | 0.005 | 1.948 | 0.005 | 0.8 | 0.005 | 1.226 | 0.005 | 0.048 | 2.455 |
| 77 | 7 | 27 | 6 | 0.005 | 1.940 | 0.005 | 0.6 | 0.005 | 1.220 | 0.005 | 0.046 | 2.455 |
| 77 | 7 | 27 | 7 | 0.005 | 1.956 | 0.005 | 0.6 | 0.005 | 1.228 | 0.005 | 0.044 | 2.455 |
| 77 | 7 | 27 | 8 | 0.005 | 1.942 | 0.005 | 0.6 | 0.005 | 1.219 | 0.005 | 0.044 | 2.455 |
| 77 | 7 | 27 | 9 | 0.005 | 1.987 | 0.005 | 0.7 | 0.005 | 1.230 | 0.005 | 0.044 | 2.455 |
| 77 | 7 | 27 | 10 | 0.005 | 1.990 | 0.005 | 0.6 | 0.005 | 1.234 | 0.005 | 0.044 | 2.455 |
| 77 | 7 | 27 | 11 | 0.005 | 1.914 | 0.005 | 0.5 | 0.005 | 1.209 | 0.005 | 0.045 | 2.455 |
| 77 | 7 | 27 | 12 | 0.005 | 1.918 | 0.005 | 0.5 | 0.005 | 1.206 | 0.005 | 0.047 | 2.456 |
| 77 | 7 | 27 | 13 | 0.005 | 1.885 | 0.005 | 0.6 | 0.005 | 1.190 | 0.005 | 0.051 | 2.456 |
| 77 | 7 | 27 | 14 | 0.005 | 1.871 | 0.005 | 0.6 | 0.005 | 1.185 | 0.005 | 0.050 | 2.455 |
| 77 | 7 | 27 | 15 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.190 | 0.005 | 0.051 | 2.455 |
| 77 | 7 | 27 | 16 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.190 | 0.005 | 0.047 | 2.456 |
| 77 | 7 | 27 | 17 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.195 | 0.005 | 0.045 | 2.456 |
| 77 | 7 | 27 | 18 | 0.005 | 1.905 | 0.005 | 0.5 | 0.005 | 1.206 | 0.005 | 0.050 | 2.456 |
| 77 | 7 | 27 | 19 | 0.005 | 1.916 | 0.005 | 0.5 | 0.005 | 1.219 | 0.005 | 0.047 | 2.457 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 27 | 20 | 0.005 | 1.926 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.045 | 2.456 |
| 77 | 7 | 27 | 21 | 0.005 | 1.927 | 0.005 | 0.5 | 0.005 | 1.212 | 0.005 | 0.038 | 2.456 |
| 77 | 7 | 27 | 22 | 0.005 | 1.925 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.039 | 2.456 |
| 77 | 7 | 27 | 23 | 0.005 | 1.923 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.037 | 2.456 |
| 77 | 7 | 27 | 24 | 0.005 | 1.906 | 0.005 | 0.5 | 0.005 | 1.202 | 0.005 | 0.038 | 2.456 |
| 77 | 7 | 28 | 1 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.041 | 2.456 |
| 77 | 7 | 28 | 2 | 0.005 | 1.892 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.044 | 2.456 |
| 77 | 7 | 28 | 3 | 0.005 | 1.888 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.046 | 2.456 |
| 77 | 7 | 28 | 4 | 0.005 | 1.890 | 0.005 | 0.5 | 0.005 | 1.200 | 0.005 | 0.047 | 2.456 |
| 77 | 7 | 28 | 5 | 0.005 | 1.917 | 0.005 | 0.5 | 0.005 | 1.208 | 0.005 | 0.040 | 2.456 |
| 77 | 7 | 28 | 6 | 0.005 | 1.931 | 0.005 | 0.5 | 0.005 | 1.208 | 0.005 | 0.037 | 2.456 |
| 77 | 7 | 28 | 7 | 0.005 | 1.915 | 0.005 | 0.5 | 0.005 | 1.203 | 0.005 | 0.041 | 2.456 |
| 77 | 7 | 28 | 8 | 0.005 | 1.909 | 0.005 | 0.5 | 0.005 | 1.201 | 0.005 | 0.048 | 2.456 |
| 77 | 7 | 28 | 9 | 0.005 | 1.890 | 0.005 | 0.5 | 0.005 | 1.193 | 0.005 | 0.054 | 2.455 |
| 77 | 7 | 28 | 10 | 0.005 | 1.886 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.054 | 2.455 |
| 77 | 7 | 28 | 11 | 0.005 | 1.841 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.054 | 2.454 |
| 77 | 7 | 28 | 12 | 0.005 | 1.830 | 0.005 | 0.5 | 0.005 | 1.162 | 0.005 | 0.058 | 2.455 |
| 77 | 7 | 28 | 13 | 0.005 | 1.825 | 0.005 | 15.3 | 0.005 | 1.163 | 0.005 | 0.058 | 2.454 |
| 77 | 7 | 28 | 14 | 0.005 | 1.839 | 0.005 | 9.7 | 0.005 | 1.164 | 0.005 | 0.057 | 2.454 |
| 77 | 7 | 28 | 15 | 0.005 | 1.842 | 0.005 | 0.5 | 0.005 | 1.168 | 0.005 | 0.056 | 2.454 |
| 77 | 7 | 28 | 16 | 0.005 | 1.832 | 0.005 | 0.5 | 0.005 | 1.165 | 0.005 | 0.055 | 2.454 |
| 77 | 7 | 28 | 17 | 0.005 | 1.839 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.054 | 2.454 |
| 77 | 7 | 28 | 18 | 0.005 | 1.851 | 0.005 | 0.5 | 0.005 | 1.177 | 0.005 | 0.054 | 2.454 |
| 77 | 7 | 28 | 19 | 0.005 | 1.849 | 0.005 | 0.5 | 0.005 | 1.178 | 0.005 | 0.050 | 2.454 |
| 77 | 7 | 28 | 20 | 0.005 | 1.877 | 0.005 | 0.5 | 0.005 | 1.196 | 0.005 | 0.050 | 2.455 |
| 77 | 7 | 28 | 21 | 0.005 | 1.915 | 0.005 | 0.5 | 0.005 | 1.213 | 0.005 | 0.051 | 2.455 |
| 77 | 7 | 28 | 22 | 0.005 | 1.926 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.051 | 2.456 |
| 77 | 7 | 28 | 23 | 0.005 | 1.926 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.051 | 2.456 |
| 77 | 7 | 28 | 24 | 0.005 | 1.924 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.052 | 2.456 |
| 77 | 7 | 29 | 1 | 0.005 | 1.921 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.050 | 2.456 |
| 77 | 7 | 29 | 2 | 0.005 | 1.925 | 0.005 | 0.5 | 0.005 | 1.213 | 0.005 | 0.051 | 2.456 |
| 77 | 7 | 29 | 3 | 0.005 | 1.921 | 0.005 | 0.5 | 0.005 | 1.210 | 0.005 | 0.049 | 2.456 |
| 77 | 7 | 29 | 4 | 0.005 | 1.937 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.049 | 2.456 |
| 77 | 7 | 29 | 5 | 0.005 | 1.929 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.046 | 2.455 |
| 77 | 7 | 29 | 6 | 0.005 | 1.911 | 0.005 | 0.5 | 0.005 | 1.208 | 0.005 | 0.048 | 2.455 |
| 77 | 7 | 29 | 7 | 0.005 | 1.901 | 0.005 | 0.5 | 0.005 | 1.202 | 0.005 | 0.049 | 2.456 |
| 77 | 7 | 29 | 8 | 0.005 | 1.886 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.051 | 2.455 |
| 77 | 7 | 29 | 9 | 0.005 | 1.876 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.052 | 2.455 |
| 77 | 7 | 29 | 10 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.051 | 2.454 |
| 77 | 7 | 29 | 11 | 0.005 | 1.849 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.054 | 2.454 |
| 77 | 7 | 29 | 12 | 0.005 | 1.839 | 0.005 | 0.5 | 0.005 | 1.164 | 0.005 | 0.057 | 2.454 |
| 77 | 7 | 29 | 13 | 0.005 | 1.854 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.057 | 2.454 |
| 77 | 7 | 29 | 14 | 0.005 | 1.869 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.054 | 2.455 |
| 77 | 7 | 29 | 15 | 0.005 | 1.871 | 0.005 | 0.5 | 0.005 | 1.180 | 0.005 | 0.056 | 2.455 |
| 77 | 7 | 29 | 16 | 0.005 | 1.849 | 0.005 | 0.5 | 0.005 | 1.068 | 0.005 | 0.059 | 2.455 |
| 77 | 7 | 29 | 17 | 0.005 | 1.836 | 0.005 | 0.5 | 0.005 | 1.158 | 0.005 | 0.060 | 2.454 |
| 77 | 7 | 29 | 18 | 0.005 | 1.851 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.056 | 2.455 |
| 77 | 7 | 29 | 19 | 0.005 | 1.872 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.050 | 2.455 |
| 77 | 7 | 29 | 20 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.051 | 2.455 |
| 77 | 7 | 29 | 21 | 0.005 | 1.895 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.052 | 2.456 |
| 77 | 7 | 29 | 22 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.195 | 0.005 | 0.052 | 2.456 |
| 77 | 7 | 29 | 23 | 0.005 | 1.890 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.051 | 2.456 |
| 77 | 7 | 29 | 24 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.045 | 2.456 |
| 77 | 7 | 30 | 1 | 0.005 | 1.893 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.049 | 2.456 |
| 77 | 7 | 30 | 2 | 0.005 | 1.891 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.052 | 2.456 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 30 | 3 | 0.005 | 1.889 | 0.005 | 0.5 | 0.005 | 1.192 | 0.005 | 0.052 | 2.456 |
| 77 | 7 | 30 | 4 | 0.005 | 1.894 | 0.005 | 0.5 | 0.005 | 1.196 | 0.005 | 0.051 | 2.456 |
| 77 | 7 | 30 | 5 | 0.005 | 1.895 | 0.005 | 0.5 | 0.005 | 1.197 | 0.005 | 0.050 | 2.456 |
| 77 | 7 | 30 | 6 | 0.005 | 1.896 | 0.005 | 0.5 | 0.005 | 1.198 | 0.005 | 0.046 | 2.456 |
| 77 | 7 | 30 | 7 | 0.005 | 1.897 | 0.005 | 0.5 | 0.005 | 1.200 | 0.005 | 0.046 | 2.456 |
| 77 | 7 | 30 | 8 | 0.005 | 1.896 | 0.005 | 0.5 | 0.005 | 1.193 | 0.005 | 0.048 | 2.456 |
| 77 | 7 | 30 | 9 | 0.005 | 1.880 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.049 | 2.456 |
| 77 | 7 | 30 | 10 | 0.005 | 1.861 | 0.005 | 0.5 | 0.005 | 1.174 | 0.005 | 0.052 | 2.456 |
| 77 | 7 | 30 | 11 | 0.005 | 1.867 | 0.005 | 0.5 | 0.005 | 1.175 | 0.005 | 0.052 | 2.455 |
| 77 | 7 | 30 | 12 | 0.005 | 1.844 | 0.005 | 0.5 | 0.005 | 1.165 | 0.005 | 0.050 | 2.455 |
| 77 | 7 | 30 | 13 | 0.005 | 1.865 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.052 | 2.455 |
| 77 | 7 | 30 | 14 | 0.005 | 1.870 | 0.005 | 0.5 | 0.005 | 1.177 | 0.005 | 0.056 | 2.455 |
| 77 | 7 | 30 | 15 | 0.005 | 1.856 | 0.005 | 0.5 | 0.005 | 1.171 | 0.005 | 0.059 | 2.455 |
| 77 | 7 | 30 | 16 | 0.005 | 1.853 | 0.005 | 0.5 | 0.005 | 1.170 | 0.005 | 0.064 | 2.455 |
| 77 | 7 | 30 | 17 | 0.005 | 1.855 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.069 | 2.455 |
| 77 | 7 | 30 | 18 | 0.005 | 1.865 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.066 | 2.454 |
| 77 | 7 | 30 | 19 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.063 | 2.454 |
| 77 | 7 | 30 | 20 | 0.005 | 1.911 | 0.005 | 0.5 | 0.005 | 1.206 | 0.005 | 0.064 | 2.455 |
| 77 | 7 | 30 | 21 | 0.005 | 1.937 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.062 | 2.456 |
| 77 | 7 | 30 | 22 | 0.005 | 1.966 | 0.005 | 0.5 | 0.005 | 1.226 | 0.005 | 0.061 | 2.456 |
| 77 | 7 | 30 | 23 | 0.005 | 1.984 | 0.005 | 0.7 | 0.005 | 1.239 | 0.005 | 0.055 | 2.456 |
| 77 | 7 | 30 | 24 | 0.005 | 1.985 | 0.005 | 0.7 | 0.005 | 1.242 | 0.005 | 0.051 | 2.457 |
| 77 | 7 | 31 | 1 | 0.005 | 2.010 | 0.005 | 0.7 | 0.005 | 1.253 | 0.005 | 0.047 | 2.457 |
| 77 | 7 | 31 | 2 | 0.005 | 1.992 | 0.005 | 0.8 | 0.005 | 1.246 | 0.005 | 0.046 | 2.458 |
| 77 | 7 | 31 | 3 | 0.005 | 1.945 | 0.005 | 0.8 | 0.005 | 1.225 | 0.005 | 0.043 | 2.458 |
| 77 | 7 | 31 | 4 | 0.005 | 1.960 | 0.005 | 0.8 | 0.005 | 1.232 | 0.005 | 0.044 | 2.458 |
| 77 | 7 | 31 | 5 | 0.005 | 1.975 | 0.005 | 0.9 | 0.005 | 1.239 | 0.005 | 0.044 | 2.459 |
| 77 | 7 | 31 | 6 | 0.005 | 1.948 | 0.005 | 0.9 | 0.005 | 1.229 | 0.005 | 0.042 | 2.459 |
| 77 | 7 | 31 | 7 | 0.005 | 1.936 | 0.005 | 0.8 | 0.005 | 1.219 | 0.005 | 0.046 | 2.459 |
| 77 | 7 | 31 | 8 | 0.005 | 1.932 | 0.005 | 0.8 | 0.005 | 1.215 | 0.005 | 0.047 | 2.459 |
| 77 | 7 | 31 | 9 | 0.005 | 1.908 | 0.005 | 0.8 | 0.005 | 1.203 | 0.005 | 0.050 | 2.458 |
| 77 | 7 | 31 | 10 | 0.005 | 1.901 | 0.005 | 0.8 | 0.005 | 1.197 | 0.005 | 0.054 | 2.458 |
| 77 | 7 | 31 | 11 | 0.005 | 1.890 | 0.005 | 0.8 | 0.005 | 1.189 | 0.005 | 0.055 | 2.458 |
| 77 | 7 | 31 | 12 | 0.005 | 1.875 | 0.005 | 0.7 | 0.005 | 1.183 | 0.005 | 0.056 | 2.458 |
| 77 | 7 | 31 | 13 | 0.005 | 1.859 | 0.005 | 0.5 | 0.005 | 1.173 | 0.005 | 0.057 | 2.458 |
| 77 | 7 | 31 | 14 | 0.005 | 1.880 | 0.005 | 0.5 | 0.005 | 1.179 | 0.005 | 0.057 | 2.458 |
| 77 | 7 | 31 | 15 | 0.005 | 1.901 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.059 | 2.458 |
| 77 | 7 | 31 | 16 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.178 | 0.005 | 0.059 | 2.457 |
| 77 | 7 | 31 | 17 | 0.005 | 1.880 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.059 | 2.457 |
| 77 | 7 | 31 | 18 | 0.005 | 1.881 | 0.005 | 0.5 | 0.005 | 1.187 | 0.005 | 0.059 | 2.457 |
| 77 | 7 | 31 | 19 | 0.005 | 1.907 | 0.005 | 0.6 | 0.005 | 1.201 | 0.005 | 0.053 | 2.457 |
| 77 | 7 | 31 | 20 | 0.005 | 1.957 | 0.005 | 0.8 | 0.005 | 1.228 | 0.005 | 0.054 | 2.458 |
| 77 | 7 | 31 | 21 | 0.005 | 1.993 | 0.005 | 0.9 | 0.005 | 1.245 | 0.005 | 0.053 | 2.460 |
| 77 | 7 | 31 | 22 | 0.005 | 1.992 | 0.005 | 0.9 | 0.005 | 1.241 | 0.005 | 0.051 | 2.460 |
| 77 | 7 | 31 | 23 | 0.005 | 1.959 | 0.005 | 1.0 | 0.005 | 1.232 | 0.005 | 0.053 | 2.460 |
| 77 | 7 | 31 | 24 | 0.005 | 1.950 | 0.005 | 1.0 | 0.005 | 1.229 | 0.005 | 0.051 | 2.460 |
| 77 | 8 | 1 | 1 | 0.005 | 1.943 | 0.005 | 0.9 | 0.005 | 1.228 | 0.005 | 0.045 | 2.459 |
| 77 | 8 | 1 | 2 | 0.005 | 1.939 | 0.005 | 0.6 | 0.005 | 1.226 | 0.005 | 0.042 | 2.459 |
| 77 | 8 | 1 | 3 | 0.005 | 1.933 | 0.005 | 0.6 | 0.005 | 1.224 | 0.005 | 0.042 | 2.459 |
| 77 | 8 | 1 | 4 | 0.005 | 1.936 | 0.005 | 0.6 | 0.005 | 1.224 | 0.005 | 0.046 | 2.459 |
| 77 | 8 | 1 | 5 | 0.005 | 1.944 | 0.005 | 0.6 | 0.005 | 1.229 | 0.005 | 0.046 | 2.459 |
| 77 | 8 | 1 | 6 | 0.005 | 1.944 | 0.005 | 0.7 | 0.005 | 1.228 | 0.005 | 0.045 | 2.459 |
| 77 | 8 | 1 | 7 | 0.005 | 1.967 | 0.005 | 0.7 | 0.005 | 1.231 | 0.005 | 0.048 | 2.459 |
| 77 | 8 | 1 | 8 | 0.005 | 1.948 | 0.005 | 0.7 | 0.005 | 1.224 | 0.005 | 0.053 | 2.459 |
| 77 | 8 | 1 | 9 | 0.005 | 1.919 | 0.005 | 0.6 | 0.005 | 1.208 | 0.005 | 0.054 | 2.459 |

RIO BLANCO OIL SHALF PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 1 | 10 | 0.005 | 1.314 | 0.005 | 0.6 | 0.005 | 0.873 | 0.005 | 0.054 | 2.458 |
| 77 | 8 | 1 | 11 | 0.005 | 1.881 | 0.005 | 7.4 | 0.005 | 1.184 | 0.005 | 0.048 | 2.457 |
| 77 | 8 | 1 | 12 | 0.005 | 1.886 | 0.005 | 0.7 | 0.005 | 1.185 | 0.005 | 0.058 | 2.457 |
| 77 | 8 | 1 | 13 | 0.041 | 1.869 | 0.005 | 0.6 | 0.005 | 1.176 | 0.005 | 0.059 | 2.458 |
| 77 | 8 | 1 | 14 | 0.005 | 1.868 | 0.005 | 0.5 | 0.005 | 1.176 | 0.005 | 0.062 | 2.457 |
| 77 | 8 | 1 | 15 | 0.005 | 1.892 | 0.005 | 0.5 | 0.005 | 1.181 | 0.005 | 0.062 | 2.456 |
| 77 | 8 | 1 | 16 | 0.005 | 1.914 | 0.005 | 0.5 | 0.005 | 1.186 | 0.005 | 0.061 | 2.455 |
| 77 | 8 | 1 | 17 | 0.005 | 1.902 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.060 | 2.455 |
| 77 | 8 | 1 | 18 | 0.005 | 1.908 | 0.005 | 0.6 | 0.005 | 1.192 | 0.005 | 0.057 | 2.455 |
| 77 | 8 | 1 | 19 | 0.005 | 1.924 | 0.005 | 0.6 | 0.005 | 1.208 | 0.005 | 0.052 | 2.455 |
| 77 | 8 | 1 | 20 | 0.005 | 1.939 | 0.005 | 0.7 | 0.005 | 1.218 | 0.005 | 0.054 | 2.456 |
| 77 | 8 | 1 | 21 | 0.005 | 1.956 | 0.005 | 1.1 | 0.005 | 1.233 | 0.005 | 0.055 | 2.457 |
| 77 | 8 | 1 | 22 | 0.005 | 1.979 | 0.005 | 1.2 | 0.005 | 1.244 | 0.005 | 0.054 | 2.458 |
| 77 | 8 | 1 | 23 | 0.005 | 1.979 | 0.005 | 1.2 | 0.005 | 1.242 | 0.005 | 0.051 | 2.457 |
| 77 | 8 | 1 | 24 | 0.005 | 1.979 | 0.005 | 1.2 | 0.005 | 1.245 | 0.005 | 0.049 | 2.457 |
| 77 | 8 | 2 | 1 | 0.005 | 1.989 | 0.005 | 1.3 | 0.005 | 1.251 | 0.005 | 0.046 | 2.457 |
| 77 | 8 | 2 | 2 | 0.005 | 1.955 | 0.005 | 1.3 | 0.005 | 1.234 | 0.005 | 0.042 | 2.456 |
| 77 | 8 | 2 | 3 | 0.005 | 1.940 | 0.005 | 1.2 | 0.005 | 1.226 | 0.005 | 0.042 | 2.456 |
| 77 | 8 | 2 | 4 | 0.005 | 1.935 | 0.005 | 1.2 | 0.005 | 1.224 | 0.005 | 0.043 | 2.456 |
| 77 | 8 | 2 | 5 | 0.005 | 1.936 | 0.005 | 1.2 | 0.005 | 1.228 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 2 | 6 | 0.005 | 1.931 | 0.005 | 1.2 | 0.005 | 1.221 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 2 | 7 | 0.005 | 1.925 | 0.005 | 1.3 | 0.005 | 1.219 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 2 | 8 | 0.005 | 1.904 | 0.005 | 1.1 | 0.005 | 1.203 | 0.005 | 0.046 | 2.456 |
| 77 | 8 | 2 | 9 | 0.005 | 1.887 | 0.005 | 1.1 | 0.005 | 1.187 | 0.005 | 0.044 | 2.455 |
| 77 | 8 | 2 | 10 | 0.005 | 1.862 | 0.005 | 1.2 | 0.005 | 1.170 | 0.005 | 0.046 | 2.455 |
| 77 | 8 | 2 | 11 | 0.005 | 1.826 | 0.005 | 1.0 | 0.005 | 1.157 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 2 | 12 | 0.005 | 1.809 | 0.005 | 1.1 | 0.005 | 1.145 | 0.005 | 0.049 | 2.453 |
| 77 | 8 | 2 | 13 | 0.005 | 1.803 | 0.005 | 1.0 | 0.005 | 1.139 | 0.005 | 0.051 | 2.452 |
| 77 | 8 | 2 | 14 | 0.005 | 1.797 | 0.005 | 1.0 | 0.005 | 1.131 | 0.005 | 0.051 | 2.451 |
| 77 | 8 | 2 | 15 | 0.005 | 1.789 | 0.005 | 0.9 | 0.005 | 1.127 | 0.005 | 0.051 | 2.451 |
| 77 | 8 | 2 | 16 | 0.005 | 1.795 | 0.005 | 0.9 | 0.005 | 1.132 | 0.005 | 0.053 | 2.451 |
| 77 | 8 | 2 | 17 | 0.005 | 1.797 | 0.005 | 0.9 | 0.005 | 1.133 | 0.005 | 0.051 | 2.451 |
| 77 | 8 | 2 | 18 | 0.005 | 1.801 | 0.005 | 1.0 | 0.005 | 1.138 | 0.005 | 0.050 | 2.451 |
| 77 | 8 | 2 | 19 | 0.005 | 1.821 | 0.005 | 1.1 | 0.005 | 1.150 | 0.005 | 0.045 | 2.451 |
| 77 | 8 | 2 | 20 | 0.005 | 1.854 | 0.005 | 1.2 | 0.005 | 1.167 | 0.005 | 0.047 | 2.452 |
| 77 | 8 | 2 | 21 | 0.005 | 1.866 | 0.005 | 1.3 | 0.005 | 1.175 | 0.005 | 0.047 | 2.453 |
| 77 | 8 | 2 | 22 | 0.005 | 1.879 | 0.005 | 1.3 | 0.005 | 1.194 | 0.005 | 0.047 | 2.453 |
| 77 | 8 | 2 | 23 | 0.005 | 1.881 | 0.005 | 1.4 | 0.005 | 1.184 | 0.005 | 0.045 | 2.453 |
| 77 | 8 | 2 | 24 | 0.005 | 1.882 | 0.005 | 1.5 | 0.005 | 1.181 | 0.005 | 0.043 | 2.453 |
| 77 | 8 | 3 | 1 | 0.005 | 1.877 | 0.005 | 1.5 | 0.005 | 1.187 | 0.005 | 0.040 | 2.453 |
| 77 | 8 | 3 | 2 | 0.005 | 1.873 | 0.005 | 1.5 | 0.005 | 1.180 | 0.005 | 0.041 | 2.453 |
| 77 | 8 | 3 | 3 | 0.005 | 1.869 | 0.005 | 1.5 | 0.005 | 1.179 | 0.005 | 0.042 | 2.453 |
| 77 | 8 | 3 | 4 | 0.005 | 1.871 | 0.005 | 1.4 | 0.005 | 1.177 | 0.005 | 0.042 | 2.453 |
| 77 | 8 | 3 | 5 | 0.005 | 1.860 | 0.005 | 1.4 | 0.005 | 1.174 | 0.005 | 0.043 | 2.453 |
| 77 | 8 | 3 | 6 | 0.005 | 1.862 | 0.005 | 1.5 | 0.005 | 1.171 | 0.005 | 0.045 | 2.453 |
| 77 | 8 | 3 | 7 | 0.005 | 1.871 | 0.005 | 1.6 | 0.005 | 1.168 | 0.005 | 0.043 | 2.453 |
| 77 | 8 | 3 | 8 | 0.005 | 1.843 | 0.005 | 1.5 | 0.005 | 1.158 | 0.005 | 0.037 | 2.453 |
| 77 | 8 | 3 | 9 | 0.005 | 1.819 | 0.005 | 1.5 | 0.005 | 1.151 | 0.005 | 0.049 | 2.452 |
| 77 | 8 | 3 | 10 | 0.005 | 1.817 | 0.005 | 1.5 | 0.005 | 1.147 | 0.005 | 0.050 | 2.452 |
| 77 | 8 | 3 | 11 | 0.005 | 1.815 | 0.005 | 1.4 | 0.005 | 1.143 | 0.005 | 0.050 | 2.452 |
| 77 | 8 | 3 | 12 | 0.005 | 1.781 | 0.005 | 1.3 | 0.005 | 1.125 | 0.005 | 0.051 | 2.451 |
| 77 | 8 | 3 | 13 | 0.005 | 1.760 | 0.005 | 1.2 | 0.005 | 1.113 | 0.005 | 0.054 | 2.451 |
| 77 | 8 | 3 | 14 | 0.005 | 1.748 | 0.005 | 1.2 | 0.005 | 1.107 | 0.005 | 0.054 | 2.451 |
| 77 | 8 | 3 | 15 | 0.005 | 1.756 | 0.005 | 1.1 | 0.005 | 1.111 | 0.005 | 0.054 | 2.451 |
| 77 | 8 | 3 | 16 | 0.005 | 1.782 | 0.005 | 1.2 | 0.005 | 1.127 | 0.005 | 0.053 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 3 | 17 | 0.005 | 1.789 | 0.005 | 1.3 | 0.005 | 1.132 | 0.005 | 0.053 | 2.452 |
| 77 | 8 | 3 | 18 | 0.005 | 1.790 | 0.005 | 1.3 | 0.005 | 1.132 | 0.005 | 0.053 | 2.452 |
| 77 | 8 | 3 | 19 | 0.005 | 1.813 | 0.005 | 1.4 | 0.005 | 1.140 | 0.005 | 0.050 | 2.452 |
| 77 | 8 | 3 | 20 | 0.005 | 1.845 | 0.005 | 1.4 | 0.005 | 1.157 | 0.005 | 0.046 | 2.452 |
| 77 | 8 | 3 | 21 | 0.005 | 1.856 | 0.005 | 1.5 | 0.005 | 1.165 | 0.005 | 0.048 | 2.453 |
| 77 | 8 | 3 | 22 | 0.005 | 1.854 | 0.005 | 1.6 | 0.005 | 1.168 | 0.005 | 0.045 | 2.453 |
| 77 | 8 | 3 | 23 | 0.005 | 1.847 | 0.005 | 1.6 | 0.005 | 1.164 | 0.005 | 0.046 | 2.453 |
| 77 | 8 | 3 | 24 | 0.005 | 1.853 | 0.005 | 1.6 | 0.005 | 1.171 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 4 | 1 | 0.005 | 1.849 | 0.005 | 1.7 | 0.005 | 1.169 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 4 | 2 | 0.005 | 1.860 | 0.005 | 1.7 | 0.005 | 1.173 | 0.005 | 0.053 | 2.453 |
| 77 | 8 | 4 | 3 | 0.005 | 1.858 | 0.005 | 1.7 | 0.005 | 1.173 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 4 | 4 | 0.005 | 1.868 | 0.005 | 1.6 | 0.005 | 1.177 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 4 | 5 | 0.005 | 1.876 | 0.005 | 1.7 | 0.005 | 1.180 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 4 | 6 | 0.005 | 1.881 | 0.005 | 1.7 | 0.005 | 1.179 | 0.005 | 0.051 | 2.454 |
| 77 | 8 | 4 | 7 | 0.005 | 1.868 | 0.005 | 1.7 | 0.005 | 1.167 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 4 | 8 | 0.005 | 1.844 | 0.005 | 1.7 | 0.005 | 1.157 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 4 | 9 | 0.005 | 1.812 | 0.005 | 1.6 | 0.005 | 1.139 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 4 | 10 | 0.005 | 1.799 | 0.005 | 1.7 | 0.005 | 1.135 | 0.005 | 0.062 | 2.452 |
| 77 | 8 | 4 | 11 | 0.005 | 1.788 | 0.005 | 1.6 | 0.005 | 1.124 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 4 | 12 | 0.005 | 1.808 | 0.005 | 1.7 | 0.005 | 1.127 | 0.005 | 0.059 | 2.452 |
| 77 | 8 | 4 | 13 | 0.005 | 1.777 | 0.005 | 1.5 | 0.005 | 1.122 | 0.005 | 0.060 | 2.452 |
| 77 | 8 | 4 | 14 | 0.005 | 1.784 | 0.005 | 1.5 | 0.005 | 1.125 | 0.005 | 0.060 | 2.452 |
| 77 | 8 | 4 | 15 | 0.005 | 1.821 | 0.005 | 1.6 | 0.005 | 1.132 | 0.005 | 0.062 | 2.452 |
| 77 | 8 | 4 | 16 | 0.005 | 1.817 | 0.005 | 1.6 | 0.005 | 1.137 | 0.005 | 0.061 | 2.452 |
| 77 | 8 | 4 | 17 | 0.005 | 1.804 | 0.005 | 1.4 | 0.005 | 1.134 | 0.005 | 0.062 | 2.452 |
| 77 | 8 | 4 | 18 | 0.005 | 1.822 | 0.005 | 1.5 | 0.005 | 1.132 | 0.005 | 0.061 | 2.452 |
| 77 | 8 | 4 | 19 | 0.005 | 1.858 | 0.005 | 1.6 | 0.005 | 1.160 | 0.005 | 0.056 | 2.453 |
| 77 | 8 | 4 | 20 | 0.005 | 1.836 | 0.005 | 1.6 | 0.005 | 1.155 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 4 | 21 | 0.005 | 1.846 | 0.005 | 1.8 | 0.005 | 1.160 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 4 | 22 | 0.005 | 1.872 | 0.005 | 1.9 | 0.005 | 1.171 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 4 | 23 | 0.005 | 1.870 | 0.005 | 1.9 | 0.005 | 1.169 | 0.005 | 0.056 | 2.454 |
| 77 | 8 | 4 | 24 | 0.005 | 1.870 | 0.005 | 1.9 | 0.005 | 1.173 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 5 | 1 | 0.005 | 1.859 | 0.005 | 1.9 | 0.005 | 1.169 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 5 | 2 | 0.005 | 1.895 | 0.005 | 1.9 | 0.005 | 1.180 | 0.005 | 0.044 | 2.454 |
| 77 | 8 | 5 | 3 | 0.005 | 1.885 | 0.005 | 1.9 | 0.005 | 1.181 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 5 | 4 | 0.005 | 1.877 | 0.005 | 1.9 | 0.005 | 1.174 | 0.005 | 0.045 | 2.454 |
| 77 | 8 | 5 | 5 | 0.005 | 1.904 | 0.005 | 1.9 | 0.005 | 1.181 | 0.005 | 0.035 | 2.454 |
| 77 | 8 | 5 | 6 | 0.005 | 1.895 | 0.005 | 1.9 | 0.005 | 1.179 | 0.005 | 0.031 | 2.454 |
| 77 | 8 | 5 | 7 | 0.005 | 1.866 | 0.005 | 1.9 | 0.005 | 1.164 | 0.005 | 0.043 | 2.455 |
| 77 | 8 | 5 | 8 | 0.005 | 1.865 | 0.005 | 1.9 | 0.005 | 1.154 | 0.005 | 0.057 | 2.454 |
| 77 | 8 | 5 | 9 | 0.005 | 1.844 | 0.005 | 1.9 | 0.005 | 1.149 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 5 | 10 | 0.005 | 1.820 | 0.005 | 2.0 | 0.005 | 1.138 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 5 | 11 | 0.005 | 1.823 | 0.005 | 1.9 | 0.005 | 1.139 | 0.005 | 0.066 | 2.453 |
| 77 | 8 | 5 | 12 | 0.005 | 1.804 | 0.005 | 1.8 | 0.005 | 1.131 | 0.005 | 0.069 | 2.453 |
| 77 | 8 | 5 | 13 | 0.005 | 1.780 | 0.005 | 1.8 | 0.005 | 1.123 | 0.005 | 0.068 | 2.453 |
| 77 | 8 | 5 | 14 | 0.005 | 1.769 | 0.005 | 1.7 | 0.005 | 1.118 | 0.005 | 0.067 | 2.453 |
| 77 | 8 | 5 | 15 | 0.005 | 1.773 | 0.005 | 1.6 | 0.005 | 1.116 | 0.005 | 0.068 | 2.453 |
| 77 | 8 | 5 | 16 | 0.005 | 1.776 | 0.005 | 1.6 | 0.005 | 1.119 | 0.005 | 0.069 | 2.452 |
| 77 | 8 | 5 | 17 | 0.005 | 1.790 | 0.005 | 1.6 | 0.005 | 1.122 | 0.005 | 0.069 | 2.452 |
| 77 | 8 | 5 | 18 | 0.005 | 1.798 | 0.005 | 1.7 | 0.005 | 1.128 | 0.005 | 0.069 | 2.453 |
| 77 | 8 | 5 | 19 | 0.005 | 1.805 | 0.005 | 1.8 | 0.005 | 1.138 | 0.005 | 0.063 | 2.453 |
| 77 | 8 | 5 | 20 | 0.005 | 1.824 | 0.005 | 1.8 | 0.005 | 1.146 | 0.005 | 0.058 | 2.454 |
| 77 | 8 | 5 | 21 | 0.005 | 1.835 | 0.005 | 1.9 | 0.005 | 1.150 | 0.005 | 0.051 | 2.454 |
| 77 | 8 | 5 | 22 | 0.005 | 1.838 | 0.005 | 2.0 | 0.005 | 1.152 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 5 | 23 | 0.005 | 1.831 | 0.005 | 2.0 | 0.005 | 1.150 | 0.005 | 0.048 | 2.454 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 5 | 24 | 0.005 | 1.826 | 0.005 | 2.2 | 0.005 | 1.151 | 0.005 | 0.046 | 2.455 |
| 77 | 8 | 6 | 1 | 0.005 | 1.846 | 0.005 | 2.1 | 0.005 | 1.154 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 6 | 2 | 0.005 | 1.835 | 0.005 | 2.1 | 0.005 | 1.155 | 0.005 | 0.045 | 2.455 |
| 77 | 8 | 6 | 3 | 0.005 | 1.836 | 0.005 | 2.1 | 0.005 | 1.155 | 0.005 | 0.042 | 2.455 |
| 77 | 8 | 6 | 4 | 0.005 | 1.840 | 0.005 | 2.1 | 0.005 | 1.156 | 0.005 | 0.043 | 2.455 |
| 77 | 8 | 6 | 5 | 0.005 | 1.858 | 0.005 | 2.0 | 0.005 | 1.161 | 0.005 | 0.043 | 2.455 |
| 77 | 8 | 6 | 6 | 0.005 | 1.857 | 0.005 | 2.1 | 0.005 | 1.158 | 0.005 | 0.044 | 2.455 |
| 77 | 8 | 6 | 7 | 0.005 | 1.871 | 0.005 | 2.2 | 0.005 | 1.156 | 0.005 | 0.044 | 2.455 |
| 77 | 8 | 6 | 8 | 0.005 | 1.842 | 0.005 | 2.1 | 0.005 | 1.150 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 6 | 9 | 0.005 | 1.814 | 0.005 | 2.2 | 0.005 | 1.139 | 0.005 | 0.059 | 2.454 |
| 77 | 8 | 6 | 10 | 0.005 | 1.786 | 0.005 | 2.2 | 0.039 | 1.124 | 0.005 | 0.065 | 2.454 |
| 77 | 8 | 6 | 11 | 0.005 | 1.770 | 0.005 | 1.9 | 0.005 | 1.117 | 0.005 | 0.066 | 2.453 |
| 77 | 8 | 6 | 12 | 0.005 | 1.769 | 0.005 | 1.8 | 0.005 | 1.117 | 0.005 | 0.068 | 2.453 |
| 77 | 8 | 6 | 13 | 0.005 | 1.756 | 0.005 | 1.9 | 0.005 | 1.111 | 0.005 | 0.069 | 2.453 |
| 77 | 8 | 6 | 14 | 0.005 | 1.756 | 0.005 | 1.8 | 0.005 | 1.109 | 0.005 | 0.068 | 2.453 |
| 77 | 8 | 6 | 15 | 0.005 | 1.753 | 0.005 | 1.8 | 0.005 | 1.107 | 0.005 | 0.068 | 2.453 |
| 77 | 8 | 6 | 16 | 0.005 | 1.763 | 0.005 | 1.8 | 0.005 | 1.114 | 0.005 | 0.067 | 2.453 |
| 77 | 8 | 6 | 17 | 0.005 | 1.767 | 0.005 | 1.8 | 0.005 | 1.118 | 0.005 | 0.065 | 2.453 |
| 77 | 8 | 6 | 18 | 0.005 | 1.798 | 0.005 | 1.8 | 0.005 | 1.133 | 0.005 | 0.060 | 2.453 |
| 77 | 8 | 6 | 19 | 0.005 | 1.808 | 0.005 | 1.9 | 0.005 | 1.140 | 0.005 | 0.056 | 2.453 |
| 77 | 8 | 6 | 20 | 0.005 | 1.829 | 0.005 | 1.9 | 0.005 | 1.147 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 6 | 21 | 0.005 | 1.835 | 0.005 | 2.0 | 0.005 | 1.151 | 0.005 | 0.061 | 2.454 |
| 77 | 8 | 6 | 22 | 0.005 | 1.850 | 0.005 | 2.1 | 0.005 | 1.154 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 6 | 23 | 0.005 | 1.842 | 0.005 | 2.1 | 0.005 | 1.153 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 6 | 24 | 0.005 | 1.829 | 0.005 | 2.2 | 0.005 | 1.150 | 0.005 | 0.054 | 2.455 |
| 77 | 8 | 7 | 1 | 0.005 | 1.827 | 0.005 | 2.1 | 0.005 | 1.149 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 7 | 2 | 0.005 | 1.840 | 0.005 | 2.2 | 0.005 | 1.153 | 0.005 | 0.055 | 2.455 |
| 77 | 8 | 7 | 3 | 0.005 | 1.837 | 0.005 | 2.2 | 0.005 | 1.153 | 0.005 | 0.058 | 2.455 |
| 77 | 8 | 7 | 4 | 0.005 | 1.849 | 0.005 | 2.1 | 0.005 | 1.162 | 0.005 | 0.059 | 2.455 |
| 77 | 8 | 7 | 5 | 0.005 | 1.850 | 0.005 | 2.2 | 0.005 | 1.161 | 0.005 | 0.061 | 2.454 |
| 77 | 8 | 7 | 6 | 0.005 | 1.835 | 0.005 | 2.2 | 0.005 | 1.153 | 0.005 | 0.065 | 2.455 |
| 77 | 8 | 7 | 7 | 0.005 | 1.834 | 0.005 | 2.1 | 0.005 | 1.151 | 0.005 | 0.067 | 2.454 |
| 77 | 8 | 7 | 8 | 0.005 | 1.810 | 0.005 | 2.1 | 0.005 | 1.141 | 0.005 | 0.072 | 2.454 |
| 77 | 8 | 7 | 9 | 0.005 | 1.796 | 0.005 | 2.1 | 0.005 | 1.133 | 0.005 | 0.073 | 2.453 |
| 77 | 8 | 7 | 10 | 0.005 | 1.786 | 0.005 | 2.0 | 0.005 | 1.127 | 0.005 | 0.075 | 2.453 |
| 77 | 8 | 7 | 11 | 0.005 | 1.763 | 0.005 | 2.0 | 0.005 | 1.114 | 0.005 | 0.071 | 2.452 |
| 77 | 8 | 7 | 12 | 0.005 | 1.751 | 0.005 | 1.9 | 0.005 | 1.106 | 0.005 | 0.067 | 2.453 |
| 77 | 8 | 7 | 13 | 0.005 | 1.746 | 0.005 | 1.7 | 0.005 | 1.105 | 0.005 | 0.065 | 2.452 |
| 77 | 8 | 7 | 14 | 0.005 | 1.734 | 0.005 | 1.4 | 0.005 | 1.100 | 0.005 | 0.065 | 2.452 |
| 77 | 8 | 7 | 15 | 0.005 | 1.725 | 0.005 | 1.4 | 0.005 | 1.095 | 0.005 | 0.064 | 2.452 |
| 77 | 8 | 7 | 16 | 0.005 | 1.725 | 0.005 | 1.2 | 0.005 | 1.093 | 0.005 | 0.063 | 2.451 |
| 77 | 8 | 7 | 17 | 0.005 | 1.727 | 0.005 | 1.5 | 0.005 | 1.095 | 0.005 | 0.059 | 2.452 |
| 77 | 8 | 7 | 18 | 0.005 | 1.753 | 0.005 | 1.4 | 0.005 | 1.111 | 0.005 | 0.055 | 2.452 |
| 77 | 8 | 7 | 19 | 0.005 | 1.764 | 0.005 | 1.4 | 0.005 | 1.115 | 0.005 | 0.054 | 2.452 |
| 77 | 8 | 7 | 20 | 0.005 | 1.783 | 0.005 | 1.6 | 0.005 | 1.127 | 0.005 | 0.052 | 2.453 |
| 77 | 8 | 7 | 21 | 0.005 | 1.796 | 0.005 | 1.8 | 0.005 | 1.132 | 0.005 | 0.051 | 2.453 |
| 77 | 8 | 7 | 22 | 0.005 | 1.803 | 0.005 | 1.7 | 0.005 | 1.137 | 0.005 | 0.051 | 2.454 |
| 77 | 8 | 7 | 23 | 0.005 | 1.809 | 0.005 | 1.7 | 0.005 | 1.138 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 7 | 24 | 0.005 | 1.819 | 0.005 | 1.8 | 0.005 | 1.144 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 8 | 1 | 0.005 | 1.813 | 0.005 | 1.9 | 0.005 | 1.144 | 0.005 | 0.051 | 2.454 |
| 77 | 8 | 8 | 2 | 0.005 | 1.827 | 0.005 | 2.0 | 0.005 | 1.149 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 8 | 3 | 0.005 | 1.819 | 0.005 | 1.8 | 0.005 | 1.146 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 8 | 4 | 0.005 | 1.820 | 0.005 | 1.9 | 0.005 | 1.147 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 8 | 5 | 0.005 | 1.818 | 0.005 | 2.0 | 0.005 | 1.145 | 0.005 | 0.044 | 2.454 |
| 77 | 8 | 8 | 6 | 0.005 | 1.819 | 0.005 | 2.0 | 0.005 | 1.145 | 0.005 | 0.044 | 2.454 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 8 | 7 | 0.005 | 1.816 | 0.005 | 2.0 | 0.005 | 1.142 | 0.005 | 0.045 | 2.454 |
| 77 | 8 | 8 | 8 | 0.005 | 1.812 | 0.005 | 2.0 | 0.005 | 1.141 | 0.005 | 0.048 | 2.453 |
| 77 | 8 | 8 | 9 | 0.005 | 1.805 | 0.005 | 2.0 | 0.005 | 1.138 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 8 | 10 | 0.005 | 1.786 | 0.005 | 1.9 | 0.005 | 1.125 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 8 | 11 | 0.005 | 1.758 | 0.005 | 1.8 | 0.005 | 1.112 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 8 | 12 | 0.005 | 1.753 | 0.005 | 1.7 | 0.005 | 1.109 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 8 | 13 | 0.005 | 1.422 | 0.005 | 5.8 | 0.005 | 0.925 | 0.005 | 0.049 | 2.452 |
| 77 | 8 | 8 | 14 | 0.005 | 1.726 | 0.005 | 2.1 | 0.005 | 1.093 | 0.005 | 0.060 | 2.452 |
| 77 | 8 | 8 | 15 | 0.005 | 1.719 | 0.005 | 1.4 | 0.005 | 1.089 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 8 | 16 | 0.005 | 1.714 | 0.005 | 1.3 | 0.005 | 1.086 | 0.005 | 0.069 | 2.451 |
| 77 | 8 | 8 | 17 | 0.005 | 1.710 | 0.005 | 1.2 | 0.005 | 1.084 | 0.005 | 0.069 | 2.451 |
| 77 | 8 | 8 | 18 | 0.005 | 1.713 | 0.005 | 1.3 | 0.005 | 1.087 | 0.005 | 0.067 | 2.451 |
| 77 | 8 | 8 | 19 | 0.005 | 1.732 | 0.005 | 1.3 | 0.005 | 1.097 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 8 | 20 | 0.005 | 1.803 | 0.005 | 1.3 | 0.005 | 1.124 | 0.005 | 0.055 | 2.452 |
| 77 | 8 | 8 | 21 | 0.005 | 1.823 | 0.005 | 1.5 | 0.005 | 1.141 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 8 | 22 | 0.005 | 1.833 | 0.005 | 1.5 | 0.005 | 1.148 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 8 | 23 | 0.005 | 1.841 | 0.005 | 1.6 | 0.005 | 1.156 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 8 | 24 | 0.005 | 1.841 | 0.005 | 1.8 | 0.005 | 1.157 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 9 | 1 | 0.005 | 1.844 | 0.005 | 1.8 | 0.005 | 1.161 | 0.010 | 0.055 | 2.454 |
| 77 | 8 | 9 | 2 | 0.005 | 1.851 | 0.005 | 1.8 | 0.005 | 1.164 | 0.011 | 0.054 | 2.453 |
| 77 | 8 | 9 | 3 | 0.005 | 1.877 | 0.005 | 1.8 | 0.005 | 1.177 | 0.012 | 0.055 | 2.453 |
| 77 | 8 | 9 | 4 | 0.005 | 1.881 | 0.010 | 1.8 | 0.005 | 1.177 | 0.012 | 0.056 | 2.453 |
| 77 | 8 | 9 | 5 | 0.005 | 1.861 | 0.010 | 1.8 | 0.005 | 1.167 | 0.012 | 0.057 | 2.453 |
| 77 | 8 | 9 | 6 | 0.005 | 1.846 | 0.011 | 1.9 | 0.005 | 1.162 | 0.013 | 0.055 | 2.453 |
| 77 | 8 | 9 | 7 | 0.005 | 1.854 | 0.011 | 1.9 | 0.005 | 1.163 | 0.013 | 0.055 | 2.453 |
| 77 | 8 | 9 | 8 | 0.005 | 1.859 | 0.012 | 1.8 | 0.005 | 1.155 | 0.014 | 0.055 | 2.453 |
| 77 | 8 | 9 | 9 | 0.005 | 1.813 | 0.012 | 1.8 | 0.005 | 1.138 | 0.014 | 0.061 | 2.453 |
| 77 | 8 | 9 | 10 | 0.005 | 1.779 | 0.013 | 1.8 | 0.005 | 1.123 | 0.015 | 0.062 | 2.452 |
| 77 | 8 | 9 | 11 | 0.005 | 1.762 | 0.012 | 1.7 | 0.005 | 1.112 | 0.014 | 0.064 | 2.452 |
| 77 | 8 | 9 | 12 | 0.005 | 1.777 | 0.012 | 1.6 | 0.005 | 1.117 | 0.014 | 0.062 | 2.451 |
| 77 | 8 | 9 | 13 | 0.005 | 1.745 | 0.012 | 1.7 | 0.005 | 1.102 | 0.014 | 0.062 | 2.451 |
| 77 | 8 | 9 | 14 | 0.005 | 1.731 | 0.012 | 1.5 | 0.005 | 1.094 | 0.014 | 0.063 | 2.451 |
| 77 | 8 | 9 | 15 | 0.005 | 1.728 | 0.012 | 1.3 | 0.005 | 1.094 | 0.014 | 0.063 | 2.451 |
| 77 | 8 | 9 | 16 | 0.005 | 1.728 | 0.013 | 1.3 | 0.005 | 1.093 | 0.015 | 0.063 | 2.450 |
| 77 | 8 | 9 | 17 | 0.005 | 1.730 | 0.012 | 1.4 | 0.005 | 1.094 | 0.014 | 0.063 | 2.450 |
| 77 | 8 | 9 | 18 | 0.005 | 1.740 | 0.012 | 1.4 | 0.005 | 1.099 | 0.015 | 0.063 | 2.450 |
| 77 | 8 | 9 | 19 | 0.005 | 1.752 | 0.012 | 1.5 | 0.005 | 1.109 | 0.014 | 0.057 | 2.450 |
| 77 | 8 | 9 | 20 | 0.005 | 1.785 | 0.005 | 1.7 | 0.005 | 1.128 | 0.012 | 0.054 | 2.451 |
| 77 | 8 | 9 | 21 | 0.005 | 1.823 | 0.005 | 1.9 | 0.005 | 1.150 | 0.011 | 0.052 | 2.452 |
| 77 | 8 | 9 | 22 | 0.005 | 1.835 | 0.005 | 1.9 | 0.005 | 1.156 | 0.011 | 0.055 | 2.453 |
| 77 | 8 | 9 | 23 | 0.005 | 1.840 | 0.005 | 2.0 | 0.005 | 1.158 | 0.011 | 0.058 | 2.453 |
| 77 | 8 | 9 | 24 | 0.005 | 1.842 | 0.005 | 2.0 | 0.005 | 1.158 | 0.011 | 0.059 | 2.453 |
| 77 | 8 | 10 | 1 | 0.005 | 1.838 | 0.005 | 2.0 | 0.005 | 1.156 | 0.011 | 0.057 | 2.453 |
| 77 | 8 | 10 | 2 | 0.005 | 1.837 | 0.005 | 2.1 | 0.005 | 1.156 | 0.011 | 0.058 | 2.453 |
| 77 | 8 | 10 | 3 | 0.005 | 1.838 | 0.005 | 2.1 | 0.005 | 1.156 | 0.011 | 0.058 | 2.453 |
| 77 | 8 | 10 | 4 | 0.005 | 1.841 | 0.005 | 2.1 | 0.005 | 1.157 | 0.012 | 0.057 | 2.453 |
| 77 | 8 | 10 | 5 | 0.005 | 1.841 | 0.005 | 2.0 | 0.005 | 1.160 | 0.012 | 0.056 | 2.453 |
| 77 | 8 | 10 | 6 | 0.005 | 1.842 | 0.010 | 2.1 | 0.005 | 1.160 | 0.012 | 0.052 | 2.453 |
| 77 | 8 | 10 | 7 | 0.005 | 1.858 | 0.010 | 2.2 | 0.005 | 1.166 | 0.012 | 0.053 | 2.453 |
| 77 | 8 | 10 | 8 | 0.005 | 1.860 | 0.010 | 2.5 | 0.005 | 1.160 | 0.012 | 0.052 | 2.453 |
| 77 | 8 | 10 | 9 | 0.005 | 1.836 | 0.011 | 2.6 | 0.005 | 1.149 | 0.013 | 0.054 | 2.453 |
| 77 | 8 | 10 | 10 | 0.005 | 1.818 | 0.012 | 2.5 | 0.005 | 1.133 | 0.014 | 0.058 | 2.452 |
| 77 | 8 | 10 | 11 | 0.005 | 1.808 | 0.005 | 2.4 | 0.005 | 1.116 | 0.005 | 0.068 | 2.451 |
| 77 | 8 | 10 | 12 | 0.005 | 1.781 | 0.024 | 2.2 | 0.005 | 1.116 | 0.019 | 0.064 | 2.451 |
| 77 | 8 | 10 | 13 | 0.005 | 1.595 | 0.005 | 2.3 | 0.005 | 1.105 | 0.005 | 0.061 | 2.450 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 10 | 14 | 0.005 | 1.876 | 0.005 | 2.2 | 0.005 | 1.099 | 0.005 | 0.061 | 2.450 |
| 77 | 8 | 10 | 15 | 0.005 | 1.780 | 0.005 | 2.2 | 0.005 | 1.098 | 0.005 | 0.062 | 2.450 |
| 77 | 8 | 10 | 16 | 0.005 | 1.753 | 0.005 | 2.0 | 0.005 | 1.106 | 0.005 | 0.063 | 2.450 |
| 77 | 8 | 10 | 17 | 0.005 | 1.762 | 0.005 | 2.1 | 0.005 | 1.111 | 0.005 | 0.062 | 2.450 |
| 77 | 8 | 10 | 18 | 0.005 | 1.783 | 0.005 | 2.1 | 0.005 | 1.123 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 10 | 19 | 0.005 | 1.818 | 0.005 | 2.3 | 0.005 | 1.142 | 0.005 | 0.054 | 2.451 |
| 77 | 8 | 10 | 20 | 0.005 | 1.827 | 0.005 | 2.4 | 0.005 | 1.150 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 10 | 21 | 0.005 | 1.850 | 0.005 | 2.6 | 0.005 | 1.161 | 0.005 | 0.052 | 2.452 |
| 77 | 8 | 10 | 22 | 0.005 | 1.889 | 0.005 | 2.7 | 0.005 | 1.177 | 0.005 | 0.047 | 2.453 |
| 77 | 8 | 10 | 23 | 0.005 | 1.887 | 0.005 | 2.7 | 0.005 | 1.179 | 0.005 | 0.046 | 2.453 |
| 77 | 8 | 10 | 24 | 0.005 | 1.891 | 0.005 | 2.7 | 0.005 | 1.183 | 0.005 | 0.044 | 2.453 |
| 77 | 8 | 11 | 1 | 0.005 | 1.900 | 0.005 | 2.8 | 0.005 | 1.182 | 0.005 | 0.044 | 2.453 |
| 77 | 8 | 11 | 2 | 0.005 | 1.890 | 0.005 | 2.8 | 0.005 | 1.180 | 0.005 | 0.043 | 2.453 |
| 77 | 8 | 11 | 3 | 0.005 | 1.885 | 0.005 | 2.8 | 0.005 | 1.179 | 0.005 | 0.044 | 2.454 |
| 77 | 8 | 11 | 4 | 0.005 | 1.689 | 0.005 | 2.8 | 0.005 | 1.182 | 0.005 | 0.044 | 2.453 |
| 77 | 8 | 11 | 5 | 0.005 | 1.889 | 0.005 | 2.8 | 0.005 | 1.183 | 0.005 | 0.043 | 2.454 |
| 77 | 8 | 11 | 6 | 0.005 | 1.900 | 0.005 | 2.8 | 0.005 | 1.185 | 0.005 | 0.039 | 2.454 |
| 77 | 8 | 11 | 7 | 0.005 | 1.904 | 0.005 | 2.9 | 0.005 | 1.189 | 0.005 | 0.039 | 2.454 |
| 77 | 8 | 11 | 8 | 0.005 | 1.902 | 0.005 | 3.1 | 0.005 | 1.189 | 0.005 | 0.042 | 2.454 |
| 77 | 8 | 11 | 9 | 0.005 | 1.861 | 0.005 | 3.0 | 0.005 | 1.172 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 11 | 10 | 0.005 | 1.850 | 0.005 | 2.8 | 0.005 | 1.163 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 11 | 11 | 0.005 | 1.809 | 0.005 | 2.8 | 0.005 | 1.141 | 0.005 | 0.064 | 2.452 |
| 77 | 8 | 11 | 12 | 0.005 | 1.793 | 0.005 | 2.5 | 0.005 | 1.125 | 0.005 | 0.064 | 2.452 |
| 77 | 8 | 11 | 13 | 0.005 | 1.782 | 0.005 | 2.4 | 0.005 | 1.119 | 0.005 | 0.063 | 2.452 |
| 77 | 8 | 11 | 14 | 0.005 | 1.755 | 0.005 | 2.4 | 0.005 | 1.107 | 0.005 | 0.065 | 2.451 |
| 77 | 8 | 11 | 15 | 0.005 | 1.761 | 0.005 | 2.5 | 0.005 | 1.112 | 0.005 | 0.067 | 2.451 |
| 77 | 8 | 11 | 16 | 0.005 | 1.792 | 0.005 | 2.6 | 0.005 | 1.127 | 0.005 | 0.064 | 2.451 |
| 77 | 8 | 11 | 17 | 0.005 | 1.804 | 0.005 | 2.6 | 0.005 | 1.139 | 0.005 | 0.060 | 2.452 |
| 77 | 8 | 11 | 18 | 0.005 | 1.806 | 0.005 | 2.5 | 0.005 | 1.138 | 0.005 | 0.059 | 2.452 |
| 77 | 8 | 11 | 19 | 0.005 | 1.815 | 0.005 | 2.5 | 0.005 | 1.142 | 0.005 | 0.055 | 2.452 |
| 77 | 8 | 11 | 20 | 0.005 | 1.841 | 0.005 | 2.7 | 0.005 | 1.161 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 11 | 21 | 0.005 | 1.858 | 0.005 | 2.8 | 0.005 | 1.170 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 11 | 22 | 0.005 | 1.859 | 0.005 | 2.8 | 0.005 | 1.172 | 0.005 | 0.056 | 2.453 |
| 77 | 8 | 11 | 23 | 0.005 | 1.861 | 0.005 | 2.9 | 0.005 | 1.173 | 0.005 | 0.059 | 2.454 |
| 77 | 8 | 11 | 24 | 0.005 | 1.866 | 0.005 | 3.0 | 0.005 | 1.176 | 0.005 | 0.057 | 2.454 |
| 77 | 8 | 12 | 1 | 0.005 | 1.862 | 0.005 | 2.9 | 0.005 | 1.174 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 12 | 2 | 0.005 | 1.862 | 0.005 | 3.0 | 0.005 | 1.170 | 0.005 | 0.056 | 2.454 |
| 77 | 8 | 12 | 3 | 0.005 | 1.863 | 0.005 | 3.0 | 0.005 | 1.168 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 12 | 4 | 0.005 | 1.869 | 0.005 | 3.0 | 0.005 | 1.170 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 12 | 5 | 0.005 | 1.855 | 0.005 | 3.1 | 0.005 | 1.167 | 0.005 | 0.050 | 2.453 |
| 77 | 8 | 12 | 6 | 0.005 | 1.851 | 0.005 | 3.1 | 0.005 | 1.167 | 0.005 | 0.049 | 2.453 |
| 77 | 8 | 12 | 7 | 0.005 | 1.849 | 0.005 | 3.0 | 0.005 | 1.166 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 12 | 8 | 0.005 | 1.834 | 0.005 | 3.0 | 0.005 | 1.158 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 12 | 9 | 0.005 | 1.817 | 0.005 | 3.6 | 0.005 | 1.148 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 12 | 9 | 0.005 | 1.802 | 0.005 | 2.8 | 0.005 | 1.140 | 0.005 | 0.057 | 2.452 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 12 | 10 | 0.005 | 1.779 | 0.005 | 2.8 | 0.005 | 1.123 | 0.005 | 0.058 | 2.452 |
| 77 | 8 | 12 | 11 | 0.005 | 1.763 | 0.005 | 2.9 | 0.005 | 1.114 | 0.005 | 0.059 | 2.452 |
| 77 | 8 | 12 | 12 | 0.005 | 1.753 | 0.005 | 3.0 | 0.005 | 1.107 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 12 | 13 | 0.005 | 1.750 | 0.005 | 2.5 | 0.005 | 1.105 | 0.005 | 0.063 | 2.451 |
| 77 | 8 | 12 | 14 | 0.005 | 1.745 | 0.005 | 2.6 | 0.005 | 1.100 | 0.005 | 0.064 | 2.451 |
| 77 | 8 | 12 | 15 | 0.005 | 1.742 | 0.005 | 2.5 | 0.005 | 1.100 | 0.005 | 0.061 | 2.450 |
| 77 | 8 | 12 | 16 | 0.005 | 1.742 | 0.005 | 2.5 | 0.005 | 1.100 | 0.005 | 0.061 | 2.450 |
| 77 | 8 | 12 | 17 | 0.005 | 1.763 | 0.005 | 2.6 | 0.005 | 1.111 | 0.005 | 0.060 | 2.450 |
| 77 | 8 | 12 | 18 | 0.005 | 1.771 | 0.005 | 2.6 | 0.005 | 1.117 | 0.005 | 0.056 | 2.451 |
| 77 | 8 | 12 | 19 | 0.005 | 1.794 | 0.005 | 2.8 | 0.005 | 1.130 | 0.005 | 0.058 | 2.452 |
| 77 | 8 | 12 | 20 | 0.005 | 1.816 | 0.005 | 2.9 | 0.005 | 1.144 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 12 | 21 | 0.005 | 1.842 | 0.005 | 2.8 | 0.005 | 1.159 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 12 | 22 | 0.005 | 1.840 | 0.005 | 3.0 | 0.005 | 1.159 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 12 | 23 | 0.005 | 1.832 | 0.005 | 3.0 | 0.005 | 1.156 | 0.005 | 0.062 | 2.453 |
| 77 | 8 | 12 | 24 | 0.005 | 1.845 | 0.005 | 3.0 | 0.005 | 1.157 | 0.005 | 0.061 | 2.454 |
| 77 | 8 | 13 | 1 | 0.005 | 1.841 | 0.005 | 3.1 | 0.005 | 1.155 | 0.005 | 0.058 | 2.454 |
| 77 | 8 | 13 | 2 | 0.005 | 1.836 | 0.005 | 3.2 | 0.005 | 1.153 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 13 | 3 | 0.005 | 1.842 | 0.005 | 3.2 | 0.005 | 1.160 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 13 | 4 | 0.005 | 1.848 | 0.005 | 3.2 | 0.005 | 1.161 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 13 | 5 | 0.005 | 1.859 | 0.005 | 3.2 | 0.005 | 1.163 | 0.005 | 0.056 | 2.453 |
| 77 | 8 | 13 | 6 | 0.005 | 1.857 | 0.005 | 3.2 | 0.005 | 1.162 | 0.005 | 0.053 | 2.453 |
| 77 | 8 | 13 | 7 | 0.005 | 1.852 | 0.005 | 3.3 | 0.005 | 1.157 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 13 | 8 | 0.005 | 1.839 | 0.005 | 3.4 | 0.005 | 1.150 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 13 | 9 | 0.005 | 1.803 | 0.005 | 3.2 | 0.005 | 1.133 | 0.005 | 0.059 | 2.452 |
| 77 | 8 | 13 | 10 | 0.005 | 1.776 | 0.005 | 3.1 | 0.005 | 1.116 | 0.005 | 0.060 | 2.452 |
| 77 | 8 | 13 | 11 | 0.005 | 1.755 | 0.005 | 3.0 | 0.005 | 1.107 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 13 | 12 | 0.005 | 1.764 | 0.005 | 2.9 | 0.005 | 1.107 | 0.005 | 0.061 | 2.451 |
| 77 | 8 | 13 | 13 | 0.005 | 1.756 | 0.005 | 2.9 | 0.005 | 1.106 | 0.005 | 0.063 | 2.451 |
| 77 | 8 | 13 | 14 | 0.005 | 1.765 | 0.005 | 2.9 | 0.005 | 1.109 | 0.005 | 0.063 | 2.451 |
| 77 | 8 | 13 | 15 | 0.005 | 1.782 | 0.005 | 3.0 | 0.005 | 1.118 | 0.005 | 0.063 | 2.452 |
| 77 | 8 | 13 | 16 | 0.005 | 1.798 | 0.005 | 2.9 | 0.005 | 1.120 | 0.005 | 0.063 | 2.452 |
| 77 | 8 | 13 | 17 | 0.005 | 1.792 | 0.005 | 3.0 | 0.005 | 1.126 | 0.005 | 0.064 | 2.452 |
| 77 | 8 | 13 | 18 | 0.005 | 1.800 | 0.005 | 2.8 | 0.005 | 1.130 | 0.005 | 0.062 | 2.452 |
| 77 | 8 | 13 | 19 | 0.005 | 1.838 | 0.005 | 3.0 | 0.005 | 1.143 | 0.005 | 0.058 | 2.452 |
| 77 | 8 | 13 | 20 | 0.005 | 1.845 | 0.005 | 3.2 | 0.005 | 1.151 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 13 | 21 | 0.005 | 1.857 | 0.005 | 3.2 | 0.005 | 1.160 | 0.005 | 0.060 | 2.453 |
| 77 | 8 | 13 | 22 | 0.005 | 1.854 | 0.005 | 3.3 | 0.005 | 1.159 | 0.005 | 0.060 | 2.453 |
| 77 | 8 | 13 | 23 | 0.005 | 1.847 | 0.005 | 3.2 | 0.005 | 1.158 | 0.005 | 0.061 | 2.453 |
| 77 | 8 | 13 | 24 | 0.005 | 1.845 | 0.005 | 3.2 | 0.005 | 1.161 | 0.005 | 0.060 | 2.453 |
| 77 | 8 | 14 | 1 | 0.005 | 1.838 | 0.005 | 3.3 | 0.005 | 1.154 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 14 | 2 | 0.005 | 1.824 | 0.005 | 3.2 | 0.005 | 1.148 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 14 | 3 | 0.005 | 1.832 | 0.005 | 3.3 | 0.005 | 1.151 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 14 | 4 | 0.005 | 1.838 | 0.005 | 3.4 | 0.005 | 1.152 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 14 | 5 | 0.005 | 1.838 | 0.005 | 3.4 | 0.005 | 1.154 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 14 | 6 | 0.005 | 1.842 | 0.005 | 3.3 | 0.005 | 1.156 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 14 | 7 | 0.005 | 1.846 | 0.005 | 3.3 | 0.005 | 1.157 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 14 | 8 | 0.005 | 1.830 | 0.005 | 3.4 | 0.005 | 1.146 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 14 | 9 | 0.005 | 1.792 | 0.005 | 3.4 | 0.005 | 1.127 | 0.005 | 0.063 | 2.452 |
| 77 | 8 | 14 | 10 | 0.005 | 1.759 | 0.005 | 3.2 | 0.005 | 1.109 | 0.005 | 0.064 | 2.452 |
| 77 | 8 | 14 | 11 | 0.005 | 1.745 | 0.005 | 3.0 | 0.005 | 1.099 | 0.005 | 0.063 | 2.451 |
| 77 | 8 | 14 | 12 | 0.005 | 1.749 | 0.005 | 2.9 | 0.005 | 1.101 | 0.005 | 0.063 | 2.451 |
| 77 | 8 | 14 | 13 | 0.005 | 1.763 | 0.005 | 3.0 | 0.005 | 1.108 | 0.005 | 0.062 | 2.451 |
| 77 | 8 | 14 | 14 | 0.005 | 1.774 | 0.005 | 3.2 | 0.005 | 1.108 | 0.005 | 0.062 | 2.451 |
| 77 | 8 | 14 | 15 | 0.005 | 1.756 | 0.005 | 3.1 | 0.005 | 1.105 | 0.005 | 0.062 | 2.451 |
| 77 | 8 | 14 | 16 | 0.005 | 1.742 | 0.005 | 3.0 | 0.005 | 1.096 | 0.005 | 0.062 | 2.451 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 14 | 17 | 0.005 | 1.745 | 0.005 | 3.0 | 0.005 | 1.099 | 0.005 | 0.062 | 2.451 |
| 77 | 8 | 14 | 18 | 0.005 | 1.755 | 0.005 | 3.0 | 0.005 | 1.105 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 14 | 19 | 0.005 | 1.773 | 0.005 | 3.1 | 0.005 | 1.115 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 14 | 20 | 0.005 | 1.800 | 0.005 | 3.3 | 0.005 | 1.131 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 14 | 21 | 0.005 | 1.835 | 0.005 | 3.3 | 0.005 | 1.146 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 14 | 22 | 0.005 | 1.846 | 0.005 | 3.3 | 0.005 | 1.151 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 14 | 23 | 0.005 | 1.831 | 0.005 | 3.4 | 0.005 | 1.150 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 14 | 24 | 0.005 | 1.830 | 0.005 | 3.3 | 0.005 | 1.151 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 15 | 1 | 0.005 | 1.823 | 0.005 | 3.3 | 0.005 | 1.149 | 0.005 | 0.057 | 2.454 |
| 77 | 8 | 15 | 2 | 0.005 | 1.817 | 0.005 | 3.3 | 0.005 | 1.146 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 15 | 3 | 0.005 | 1.815 | 0.005 | 3.6 | 0.005 | 1.145 | 0.005 | 0.056 | 2.454 |
| 77 | 8 | 15 | 4 | 0.005 | 1.819 | 0.005 | 3.3 | 0.005 | 1.145 | 0.005 | 0.056 | 2.454 |
| 77 | 8 | 15 | 5 | 0.005 | 1.826 | 0.005 | 3.4 | 0.005 | 1.150 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 15 | 6 | 0.005 | 1.844 | 0.005 | 3.5 | 0.005 | 1.153 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 15 | 7 | 0.005 | 1.843 | 0.005 | 3.6 | 0.005 | 1.154 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 15 | 8 | 0.005 | 1.848 | 0.005 | 3.6 | 0.005 | 1.164 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 15 | 9 | 0.005 | 1.818 | 0.005 | 3.5 | 0.005 | 1.144 | 0.005 | 0.054 | 2.453 |
| 77 | 8 | 15 | 10 | 0.005 | 1.564 | 0.005 | 4.6 | 0.005 | 1.061 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 15 | 11 | 0.005 | 1.767 | 0.005 | 3.5 | 0.005 | 1.115 | 0.005 | 0.054 | 2.452 |
| 77 | 8 | 15 | 12 | 0.005 | 1.757 | 0.005 | 3.2 | 0.005 | 1.107 | 0.005 | 0.061 | 2.452 |
| 77 | 8 | 15 | 13 | 0.005 | 1.751 | 0.005 | 3.1 | 0.005 | 1.103 | 0.005 | 0.060 | 2.451 |
| 77 | 8 | 15 | 14 | 0.005 | 1.756 | 0.005 | 3.3 | 0.005 | 1.105 | 0.005 | 0.059 | 2.451 |
| 77 | 8 | 15 | 15 | 0.005 | 1.775 | 0.005 | 3.5 | 0.005 | 1.117 | 0.005 | 0.053 | 2.452 |
| 77 | 8 | 15 | 16 | 0.005 | 1.782 | 0.005 | 3.4 | 0.005 | 1.120 | 0.005 | 0.051 | 2.453 |
| 77 | 8 | 15 | 17 | 0.005 | 1.793 | 0.005 | 3.5 | 0.005 | 1.126 | 0.005 | 0.047 | 2.453 |
| 77 | 8 | 15 | 18 | 0.005 | 1.809 | 0.005 | 3.6 | 0.005 | 1.135 | 0.005 | 0.044 | 2.453 |
| 77 | 8 | 15 | 19 | 0.005 | 1.823 | 0.005 | 3.6 | 0.005 | 1.147 | 0.005 | 0.044 | 2.454 |
| 77 | 8 | 15 | 20 | 0.005 | 1.812 | 0.005 | 3.6 | 0.005 | 1.142 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 15 | 21 | 0.005 | 1.814 | 0.005 | 3.6 | 0.005 | 1.142 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 15 | 22 | 0.005 | 1.826 | 0.005 | 3.6 | 0.005 | 1.148 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 15 | 23 | 0.005 | 1.811 | 0.005 | 3.6 | 0.005 | 1.141 | 0.005 | 0.040 | 2.454 |
| 77 | 8 | 15 | 24 | 0.005 | 1.802 | 0.005 | 3.5 | 0.005 | 1.135 | 0.005 | 0.045 | 2.454 |
| 77 | 8 | 16 | 1 | 0.005 | 1.826 | 0.005 | 3.4 | 0.005 | 1.134 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 16 | 2 | 0.005 | 1.799 | 0.005 | 3.4 | 0.005 | 1.134 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 16 | 3 | 0.005 | 1.811 | 0.005 | 3.4 | 0.005 | 1.134 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 16 | 4 | 0.005 | 1.799 | 0.005 | 3.2 | 0.005 | 1.128 | 0.005 | 0.029 | 2.454 |
| 77 | 8 | 16 | 5 | 0.005 | 1.796 | 0.005 | 3.0 | 0.005 | 1.128 | 0.005 | 0.032 | 2.454 |
| 77 | 8 | 16 | 6 | 0.005 | 1.803 | 0.005 | 2.9 | 0.005 | 1.133 | 0.005 | 0.040 | 2.454 |
| 77 | 8 | 16 | 7 | 0.005 | 1.800 | 0.005 | 3.0 | 0.005 | 1.134 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 16 | 8 | 0.005 | 1.689 | 0.005 | 3.2 | 0.005 | 1.138 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 16 | 9 | 0.005 | 1.807 | 0.005 | 3.1 | 0.005 | 1.132 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 16 | 10 | 0.005 | 1.779 | 0.005 | 3.0 | 0.005 | 1.116 | 0.005 | 0.057 | 2.453 |
| 77 | 8 | 16 | 11 | 0.005 | 1.761 | 0.005 | 3.0 | 0.005 | 1.107 | 0.005 | 0.059 | 2.453 |
| 77 | 8 | 16 | 12 | 0.005 | 1.784 | 0.005 | 3.0 | 0.005 | 1.124 | 0.005 | 0.058 | 2.452 |
| 77 | 8 | 16 | 13 | 0.005 | 1.810 | 0.005 | 3.0 | 0.005 | 1.135 | 0.005 | 0.058 | 2.453 |
| 77 | 8 | 16 | 14 | 0.005 | 1.803 | 0.005 | 3.1 | 0.005 | 1.130 | 0.005 | 0.051 | 2.453 |
| 77 | 8 | 16 | 15 | 0.005 | 1.802 | 0.005 | 3.0 | 0.005 | 1.126 | 0.005 | 0.061 | 2.453 |
| 77 | 8 | 16 | 16 | 0.005 | 1.767 | 0.005 | 2.8 | 0.005 | 1.105 | 0.005 | 0.062 | 2.452 |
| 77 | 8 | 16 | 17 | 0.005 | 1.764 | 0.005 | 2.8 | 0.005 | 1.106 | 0.005 | 0.061 | 2.452 |
| 77 | 8 | 16 | 18 | 0.005 | 1.765 | 0.005 | 2.7 | 0.005 | 1.111 | 0.005 | 0.060 | 2.452 |
| 77 | 8 | 16 | 19 | 0.005 | 1.773 | 0.005 | 2.7 | 0.005 | 1.117 | 0.005 | 0.057 | 2.452 |
| 77 | 8 | 16 | 20 | 0.005 | 1.791 | 0.005 | 2.8 | 0.005 | 1.128 | 0.005 | 0.055 | 2.453 |
| 77 | 8 | 16 | 21 | 0.005 | 1.804 | 0.005 | 2.9 | 0.005 | 1.137 | 0.005 | 0.055 | 2.454 |
| 77 | 8 | 16 | 22 | 0.005 | 1.813 | 0.005 | 3.0 | 0.005 | 1.141 | 0.005 | 0.056 | 2.454 |
| 77 | 8 | 16 | 23 | 0.005 | 1.816 | 0.005 | 3.2 | 0.005 | 1.142 | 0.005 | 0.057 | 2.454 |

RIO BLANCO OIL SHALF PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 16 | 24 | 0.005 | 1.825 | 0.005 | 3.5 | 0.005 | 1.143 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 17 | 1 | 0.005 | 1.815 | 0.005 | 3.4 | 0.005 | 1.141 | 0.005 | 0.049 | 2.454 |
| 77 | 8 | 17 | 2 | 0.005 | 1.812 | 0.005 | 3.2 | 0.005 | 1.141 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 17 | 3 | 0.005 | 1.813 | 0.005 | 3.4 | 0.005 | 1.141 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 17 | 4 | 0.005 | 1.816 | 0.005 | 3.4 | 0.005 | 1.143 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 17 | 5 | 0.005 | 1.817 | 0.005 | 3.2 | 0.005 | 1.143 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 17 | 6 | 0.005 | 1.823 | 0.005 | 3.2 | 0.005 | 1.144 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 17 | 7 | 0.005 | 1.838 | 0.005 | 3.2 | 0.005 | 1.152 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 17 | 8 | 0.005 | 1.862 | 0.005 | 3.3 | 0.005 | 1.153 | 0.005 | 0.045 | 2.454 |
| 77 | 8 | 17 | 9 | 0.005 | 1.843 | 0.005 | 5.1 | 0.005 | 1.145 | 0.005 | 0.044 | 2.455 |
| 77 | 8 | 17 | 10 | 0.005 | 1.974 | 0.005 | 3.2 | 0.005 | 1.129 | 0.005 | 0.052 | 2.455 |
| 77 | 8 | 17 | 11 | 0.005 | 1.807 | 0.005 | 3.0 | 0.005 | 1.129 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 17 | 12 | 0.005 | 1.819 | 0.005 | 3.1 | 0.005 | 1.143 | 0.005 | 0.045 | 2.455 |
| 77 | 8 | 17 | 13 | 0.005 | 1.823 | 0.005 | 3.3 | 0.005 | 1.146 | 0.005 | 0.049 | 2.454 |
| 77 | 8 | 17 | 14 | 0.005 | 1.813 | 0.005 | 3.6 | 0.005 | 1.141 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 17 | 15 | 0.005 | 1.812 | 0.005 | 3.3 | 0.005 | 1.136 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 17 | 16 | 0.005 | 1.840 | 0.005 | 3.2 | 0.005 | 1.157 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 17 | 17 | 0.005 | 1.188 | 0.005 | 3.5 | 0.005 | 1.199 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 17 | 18 | 0.005 | 1.675 | 0.005 | 3.3 | 0.005 | 1.213 | 0.005 | 0.049 | 2.454 |
| 77 | 8 | 17 | 19 | 0.005 | 1.972 | 0.005 | 3.4 | 0.005 | 1.224 | 0.005 | 0.041 | 2.454 |
| 77 | 8 | 17 | 20 | 0.005 | 1.988 | 0.005 | 3.4 | 0.005 | 1.231 | 0.005 | 0.031 | 2.455 |
| 77 | 8 | 17 | 21 | 0.005 | 1.980 | 0.005 | 3.4 | 0.005 | 1.233 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 17 | 22 | 0.005 | 2.009 | 0.005 | 3.1 | 0.005 | 1.236 | 0.005 | 0.029 | 2.455 |
| 77 | 8 | 17 | 23 | 0.005 | 1.991 | 0.005 | 3.4 | 0.005 | 1.231 | 0.005 | 0.027 | 2.455 |
| 77 | 8 | 17 | 24 | 0.005 | 1.967 | 0.005 | 3.6 | 0.005 | 1.228 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 18 | 1 | 0.005 | 1.963 | 0.005 | 3.4 | 0.005 | 1.226 | 0.005 | 0.033 | 2.455 |
| 77 | 8 | 18 | 2 | 0.005 | 1.980 | 0.005 | 3.5 | 0.005 | 1.226 | 0.005 | 0.031 | 2.455 |
| 77 | 8 | 18 | 3 | 0.005 | 1.962 | 0.005 | 3.6 | 0.005 | 1.225 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 18 | 4 | 0.005 | 1.946 | 0.005 | 3.5 | 0.005 | 1.221 | 0.005 | 0.034 | 2.455 |
| 77 | 8 | 18 | 5 | 0.005 | 1.943 | 0.005 | 3.3 | 0.005 | 1.218 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 18 | 6 | 0.005 | 1.943 | 0.005 | 3.0 | 0.005 | 1.218 | 0.005 | 0.032 | 2.456 |
| 77 | 8 | 18 | 7 | 0.005 | 1.938 | 0.005 | 10.7 | 0.005 | 1.216 | 0.005 | 0.033 | 2.455 |
| 77 | 8 | 18 | 8 | 0.005 | 1.941 | 0.005 | 12.7 | 0.005 | 1.216 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 18 | 9 | 0.005 | 1.941 | 0.005 | 12.7 | 0.005 | 1.214 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 18 | 10 | 0.005 | 1.943 | 0.005 | 12.7 | 0.005 | 1.213 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 18 | 11 | 0.005 | 1.926 | 0.005 | 12.7 | 0.005 | 1.207 | 0.005 | 0.033 | 2.455 |
| 77 | 8 | 18 | 12 | 0.005 | 1.923 | 0.005 | 12.7 | 0.005 | 1.210 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 18 | 13 | 0.005 | 1.911 | 0.005 | 12.7 | 0.005 | 1.200 | 0.005 | 0.033 | 2.455 |
| 77 | 8 | 18 | 14 | 0.005 | 1.894 | 0.005 | 12.6 | 0.005 | 1.189 | 0.005 | 0.037 | 2.455 |
| 77 | 8 | 18 | 15 | 0.005 | 1.877 | 0.005 | 12.4 | 0.005 | 1.183 | 0.005 | 0.039 | 2.454 |
| 77 | 8 | 18 | 16 | 0.005 | 1.861 | 0.005 | 12.3 | 0.005 | 1.173 | 0.005 | 0.041 | 2.454 |
| 77 | 8 | 18 | 17 | 0.005 | 1.872 | 0.005 | 12.3 | 0.005 | 1.179 | 0.005 | 0.043 | 2.454 |
| 77 | 8 | 18 | 18 | 0.005 | 1.878 | 0.005 | 12.2 | 0.005 | 1.183 | 0.005 | 0.048 | 2.454 |
| 77 | 8 | 18 | 19 | 0.005 | 1.896 | 0.005 | 12.4 | 0.005 | 1.191 | 0.005 | 0.045 | 2.454 |
| 77 | 8 | 18 | 20 | 0.005 | 1.945 | 0.005 | 12.6 | 0.005 | 1.217 | 0.005 | 0.039 | 2.455 |
| 77 | 8 | 18 | 21 | 0.005 | 1.957 | 0.005 | 12.7 | 0.005 | 1.223 | 0.005 | 0.035 | 2.455 |
| 77 | 8 | 18 | 22 | 0.005 | 1.944 | 0.005 | 12.8 | 0.005 | 1.222 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 18 | 23 | 0.005 | 1.944 | 0.005 | 12.8 | 0.005 | 1.221 | 0.005 | 0.033 | 2.456 |
| 77 | 8 | 18 | 24 | 0.005 | 1.949 | 0.005 | 12.7 | 0.005 | 1.224 | 0.005 | 0.034 | 2.456 |
| 77 | 8 | 19 | 1 | 0.005 | 1.958 | 0.005 | 12.7 | 0.005 | 1.230 | 0.005 | 0.037 | 2.456 |
| 77 | 8 | 19 | 2 | 0.005 | 1.972 | 0.005 | 12.7 | 0.005 | 1.234 | 0.005 | 0.037 | 2.456 |
| 77 | 8 | 19 | 3 | 0.005 | 1.966 | 0.005 | 12.6 | 0.005 | 1.232 | 0.005 | 0.034 | 2.456 |
| 77 | 8 | 19 | 4 | 0.005 | 1.945 | 0.005 | 12.6 | 0.005 | 1.221 | 0.005 | 0.034 | 2.456 |
| 77 | 8 | 19 | 5 | 0.005 | 1.942 | 0.005 | 12.6 | 0.005 | 1.218 | 0.005 | 0.035 | 2.456 |
| 77 | 8 | 19 | 6 | 0.005 | 1.945 | 0.005 | 12.6 | 0.005 | 1.222 | 0.005 | 0.035 | 2.456 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 19 | 7 | 0.005 | 1.956 | 0.005 | 12.7 | 0.005 | 1.219 | 0.005 | 0.037 | 2.456 |
| 77 | 8 | 19 | 8 | 0.005 | 1.948 | 0.005 | 12.7 | 0.005 | 1.215 | 0.005 | 0.030 | 2.456 |
| 77 | 8 | 19 | 9 | 0.005 | 1.929 | 0.005 | 12.7 | 0.005 | 1.205 | 0.005 | 0.037 | 2.455 |
| 77 | 8 | 19 | 10 | 0.005 | 1.907 | 0.005 | 13.0 | 0.005 | 1.195 | 0.005 | 0.038 | 2.455 |
| 77 | 8 | 19 | 11 | 0.005 | 1.905 | 0.005 | 12.5 | 0.005 | 1.193 | 0.005 | 0.038 | 2.454 |
| 77 | 8 | 19 | 12 | 0.005 | 1.919 | 0.005 | 12.4 | 0.005 | 1.202 | 0.005 | 0.037 | 2.454 |
| 77 | 8 | 19 | 13 | 0.005 | 1.907 | 0.005 | 12.5 | 0.005 | 1.198 | 0.005 | 0.039 | 2.454 |
| 77 | 8 | 19 | 14 | 0.005 | 1.911 | 0.005 | 12.5 | 0.005 | 1.199 | 0.005 | 0.040 | 2.454 |
| 77 | 8 | 19 | 15 | 0.005 | 1.899 | 0.005 | 13.2 | 0.005 | 1.189 | 0.005 | 0.038 | 2.455 |
| 77 | 8 | 19 | 16 | 0.005 | 1.898 | 0.005 | 17.7 | 0.005 | 1.188 | 0.005 | 0.038 | 2.454 |
| 77 | 8 | 19 | 17 | 0.005 | 1.894 | 0.005 | 15.1 | 0.005 | 1.185 | 0.005 | 0.039 | 2.454 |
| 77 | 8 | 19 | 18 | 0.005 | 1.903 | 0.005 | 0.5 | 0.005 | 1.186 | 0.005 | 0.039 | 2.454 |
| 77 | 8 | 19 | 19 | 0.005 | 1.929 | 0.005 | 0.5 | 0.005 | 1.201 | 0.005 | 0.034 | 2.454 |
| 77 | 8 | 19 | 20 | 0.005 | 1.942 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 19 | 21 | 0.005 | 1.951 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.034 | 2.455 |
| 77 | 8 | 19 | 22 | 0.005 | 1.949 | 0.005 | 0.5 | 0.005 | 1.223 | 0.005 | 0.033 | 2.456 |
| 77 | 8 | 19 | 23 | 0.005 | 1.948 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.033 | 2.456 |
| 77 | 8 | 19 | 24 | 0.005 | 1.939 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.032 | 2.456 |
| 77 | 8 | 20 | 1 | 0.005 | 1.943 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.034 | 2.456 |
| 77 | 8 | 20 | 2 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.032 | 2.456 |
| 77 | 8 | 20 | 3 | 0.005 | 1.951 | 0.005 | 0.5 | 0.005 | 1.224 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 20 | 4 | 0.005 | 1.946 | 0.005 | 0.5 | 0.005 | 1.222 | 0.005 | 0.032 | 2.455 |
| 77 | 8 | 20 | 5 | 0.005 | 1.961 | 0.005 | 0.5 | 0.005 | 1.228 | 0.005 | 0.032 | 2.456 |
| 77 | 8 | 20 | 6 | 0.005 | 1.958 | 0.005 | 0.5 | 0.005 | 1.228 | 0.005 | 0.032 | 2.456 |
| 77 | 8 | 20 | 7 | 0.005 | 1.967 | 0.005 | 0.5 | 0.005 | 1.224 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 20 | 8 | 0.005 | 1.953 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.032 | 2.456 |
| 77 | 8 | 20 | 9 | 0.005 | 1.935 | 0.005 | 0.5 | 0.005 | 1.205 | 0.005 | 0.034 | 2.455 |
| 77 | 8 | 20 | 10 | 0.005 | 1.920 | 0.005 | 0.5 | 0.005 | 1.194 | 0.005 | 0.036 | 2.455 |
| 77 | 8 | 20 | 11 | 0.005 | 1.898 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.041 | 2.455 |
| 77 | 8 | 20 | 12 | 0.005 | 1.890 | 0.005 | 0.5 | 0.005 | 1.188 | 0.005 | 0.041 | 2.455 |
| 77 | 8 | 20 | 13 | 0.005 | 1.905 | 0.005 | 0.5 | 0.005 | 1.189 | 0.005 | 0.041 | 2.454 |
| 77 | 8 | 20 | 14 | 0.005 | 1.917 | 0.005 | 0.5 | 0.005 | 1.191 | 0.005 | 0.042 | 2.454 |
| 77 | 8 | 20 | 15 | 0.005 | 1.892 | 0.005 | 0.5 | 0.005 | 1.184 | 0.005 | 0.043 | 2.454 |
| 77 | 8 | 20 | 16 | 0.005 | 1.887 | 0.005 | 0.5 | 0.005 | 1.183 | 0.005 | 0.043 | 2.454 |
| 77 | 8 | 20 | 17 | 0.005 | 1.892 | 0.005 | 0.5 | 0.005 | 1.187 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 20 | 18 | 0.005 | 1.910 | 0.005 | 0.5 | 0.005 | 1.199 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 20 | 19 | 0.005 | 1.929 | 0.005 | 0.5 | 0.005 | 1.206 | 0.005 | 0.043 | 2.455 |
| 77 | 8 | 20 | 20 | 0.005 | 1.939 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.040 | 2.455 |
| 77 | 8 | 20 | 21 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.220 | 0.005 | 0.041 | 2.455 |
| 77 | 8 | 20 | 22 | 0.005 | 1.972 | 0.005 | 0.5 | 0.005 | 1.229 | 0.005 | 0.045 | 2.455 |
| 77 | 8 | 20 | 23 | 0.005 | 1.946 | 0.005 | 0.5 | 0.005 | 1.221 | 0.005 | 0.051 | 2.456 |
| 77 | 8 | 20 | 24 | 0.005 | 1.938 | 0.005 | 0.5 | 0.005 | 1.215 | 0.005 | 0.049 | 2.456 |
| 77 | 8 | 21 | 1 | 0.005 | 1.933 | 0.005 | 0.5 | 0.005 | 1.213 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 21 | 2 | 0.005 | 1.937 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 21 | 3 | 0.005 | 1.941 | 0.005 | 0.5 | 0.005 | 1.213 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 21 | 4 | 0.005 | 1.939 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.049 | 2.455 |
| 77 | 8 | 21 | 5 | 0.005 | 1.947 | 0.005 | 0.5 | 0.005 | 1.217 | 0.005 | 0.050 | 2.455 |
| 77 | 8 | 21 | 6 | 0.005 | 1.945 | 0.005 | 0.5 | 0.005 | 1.216 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 21 | 7 | 0.005 | 1.950 | 0.005 | 0.5 | 0.005 | 1.218 | 0.005 | 0.048 | 2.456 |
| 77 | 8 | 21 | 8 | 0.005 | 1.953 | 0.005 | 0.5 | 0.005 | 1.210 | 0.005 | 0.040 | 2.455 |
| 77 | 8 | 21 | 9 | 0.005 | 1.940 | 0.005 | 0.5 | 0.005 | 1.214 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 21 | 10 | 0.005 | 1.949 | 0.005 | 10.6 | 0.005 | 1.220 | 0.005 | 0.051 | 2.455 |
| 77 | 8 | 21 | 11 | 0.005 | 1.946 | 0.005 | 0.6 | 0.005 | 1.217 | 0.005 | 0.050 | 2.455 |
| 77 | 8 | 21 | 12 | 0.005 | 1.958 | 0.005 | 0.5 | 0.005 | 1.209 | 0.005 | 0.051 | 2.455 |
| 77 | 8 | 21 | 13 | 0.005 | 1.918 | 0.005 | 0.5 | 0.005 | 1.182 | 0.005 | 0.052 | 2.455 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 21 | 14 | 0.005 | 1.885 | 0.005 | 0.5 | 0.005 | 1.172 | 0.005 | 0.052 | 2.454 |
| 77 | 8 | 21 | 15 | 0.005 | 1.869 | 0.005 | 1.3 | 0.005 | 1.163 | 0.005 | 0.051 | 2.453 |
| 77 | 8 | 21 | 16 | 0.005 | 1.865 | 0.005 | 1.8 | 0.005 | 1.161 | 0.005 | 0.052 | 2.453 |
| 77 | 8 | 21 | 17 | 0.005 | 1.872 | 0.005 | 2.0 | 0.005 | 1.174 | 0.005 | 0.049 | 2.454 |
| 77 | 8 | 21 | 18 | 0.005 | 1.898 | 0.005 | 2.4 | 0.005 | 1.190 | 0.005 | 0.046 | 2.455 |
| 77 | 8 | 21 | 19 | 0.005 | 1.919 | 0.005 | 2.6 | 0.005 | 1.198 | 0.005 | 0.040 | 2.455 |
| 77 | 8 | 21 | 20 | 0.005 | 1.931 | 0.005 | 2.6 | 0.005 | 1.210 | 0.005 | 0.043 | 2.455 |
| 77 | 8 | 21 | 21 | 0.005 | 1.939 | 0.005 | 2.6 | 0.005 | 1.216 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 21 | 22 | 0.005 | 1.938 | 0.005 | 2.7 | 0.005 | 1.216 | 0.005 | 0.042 | 2.456 |
| 77 | 8 | 21 | 23 | 0.005 | 1.931 | 0.005 | 2.6 | 0.005 | 1.211 | 0.005 | 0.036 | 2.455 |
| 77 | 8 | 21 | 24 | 0.005 | 1.928 | 0.005 | 2.6 | 0.005 | 1.210 | 0.005 | 0.037 | 2.456 |
| 77 | 8 | 22 | 1 | 0.005 | 1.922 | 0.005 | 2.7 | 0.005 | 1.207 | 0.005 | 0.042 | 2.456 |
| 77 | 8 | 22 | 2 | 0.005 | 1.929 | 0.005 | 2.6 | 0.005 | 1.208 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 22 | 3 | 0.005 | 1.922 | 0.005 | 2.7 | 0.005 | 1.206 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 22 | 4 | 0.005 | 1.920 | 0.005 | 2.6 | 0.005 | 1.204 | 0.005 | 0.043 | 2.456 |
| 77 | 8 | 22 | 5 | 0.005 | 1.920 | 0.005 | 2.7 | 0.005 | 1.206 | 0.005 | 0.039 | 2.456 |
| 77 | 8 | 22 | 6 | 0.005 | 1.922 | 0.005 | 2.7 | 0.005 | 1.206 | 0.005 | 0.041 | 2.456 |
| 77 | 8 | 22 | 7 | 0.005 | 1.940 | 0.005 | 2.7 | 0.005 | 1.210 | 0.005 | 0.041 | 2.456 |
| 77 | 8 | 22 | 8 | 0.005 | 1.936 | 0.005 | 2.7 | 0.005 | 1.208 | 0.005 | 0.043 | 2.456 |
| 77 | 8 | 22 | 9 | 0.005 | 1.920 | 0.005 | 2.7 | 0.005 | 1.200 | 0.005 | 0.046 | 2.455 |
| 77 | 8 | 22 | 10 | 0.005 | 1.887 | 0.005 | 2.6 | 0.005 | 1.183 | 0.005 | 0.051 | 2.455 |
| 77 | 8 | 22 | 11 | 0.005 | 1.892 | 0.005 | 1.9 | 0.005 | 1.186 | 0.005 | 0.051 | 2.455 |
| 77 | 8 | 22 | 12 | 0.005 | 1.889 | 0.005 | 1.0 | 0.005 | 1.180 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 22 | 13 | 0.005 | 1.876 | 0.005 | 0.9 | 0.005 | 1.176 | 0.005 | 0.054 | 2.454 |
| 77 | 8 | 22 | 14 | 0.005 | 1.478 | 0.005 | 2.1 | 0.005 | 0.876 | 0.005 | 0.053 | 2.454 |
| 77 | 8 | 22 | 15 | 0.005 | 0.041 | 0.020 | 20.9 | 0.005 | 0.026 | 0.011 | 0.003 | 2.454 |
| 77 | 8 | 22 | 16 | 0.005 | 0.029 | 0.017 | 27.4 | 0.005 | 0.005 | 0.005 | 0.001 | 2.453 |
| 77 | 8 | 22 | 17 | 0.005 | 0.658 | 0.005 | 9.3 | 0.005 | 0.492 | 0.005 | 0.045 | 2.453 |
| 77 | 8 | 22 | 18 | 0.005 | 1.857 | 0.005 | 3.4 | 0.005 | 1.167 | 0.005 | 0.049 | 2.453 |
| 77 | 8 | 22 | 19 | 0.005 | 1.893 | 0.005 | 3.4 | 0.005 | 1.192 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 22 | 20 | 0.005 | 1.917 | 0.005 | 3.3 | 0.005 | 1.207 | 0.005 | 0.046 | 2.455 |
| 77 | 8 | 22 | 21 | 0.005 | 1.936 | 0.005 | 3.2 | 0.005 | 1.217 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 22 | 22 | 0.005 | 1.929 | 0.005 | 3.2 | 0.005 | 1.213 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 22 | 23 | 0.005 | 1.940 | 0.005 | 3.2 | 0.005 | 1.218 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 22 | 24 | 0.005 | 1.948 | 0.005 | 3.2 | 0.005 | 1.221 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 23 | 1 | 0.005 | 1.940 | 0.005 | 3.3 | 0.005 | 1.218 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 23 | 2 | 0.005 | 1.933 | 0.005 | 3.3 | 0.005 | 1.215 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 23 | 3 | 0.005 | 1.932 | 0.005 | 3.3 | 0.005 | 1.215 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 23 | 4 | 0.005 | 1.944 | 0.005 | 3.3 | 0.005 | 1.217 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 23 | 5 | 0.005 | 1.936 | 0.005 | 3.3 | 0.005 | 1.217 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 23 | 6 | 0.005 | 1.932 | 0.005 | 3.4 | 0.005 | 1.215 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 23 | 7 | 0.005 | 1.952 | 0.005 | 3.3 | 0.005 | 1.217 | 0.005 | 0.041 | 2.456 |
| 77 | 8 | 23 | 8 | 0.005 | 1.942 | 0.005 | 3.3 | 0.005 | 1.212 | 0.005 | 0.044 | 2.456 |
| 77 | 8 | 23 | 9 | 0.005 | 1.076 | 0.005 | 1.4 | 0.005 | 0.654 | 0.005 | 0.024 | 2.455 |
| 77 | 8 | 23 | 10 | 0.005 | 0.028 | 0.005 | 0.8 | 0.005 | 0.004 | 0.005 | 0.000 | 2.455 |
| 77 | 8 | 23 | 11 | 0.005 | 0.025 | 0.005 | 25.8 | 0.005 | 0.003 | 0.005 | 0.000 | 2.454 |
| 77 | 8 | 23 | 12 | 0.005 | 0.024 | 0.005 | 2.7 | 0.005 | 0.003 | 0.005 | 0.000 | 2.454 |
| 77 | 8 | 23 | 13 | 0.005 | 0.047 | 0.005 | 36.4 | 0.005 | 0.012 | 0.005 | 0.023 | 2.454 |
| 77 | 8 | 23 | 14 | 0.099 | 0.026 | 0.005 | 2.5 | 0.005 | 0.007 | 0.005 | 0.080 | 2.454 |
| 77 | 8 | 23 | 15 | 0.604 | 0.027 | 0.005 | 30.5 | 0.005 | 0.003 | 0.005 | 0.112 | 2.454 |
| 77 | 8 | 23 | 16 | 0.622 | 0.024 | 0.005 | 15.1 | 0.005 | 0.003 | 0.005 | 0.143 | 2.453 |
| 77 | 8 | 23 | 17 | 0.633 | 1.217 | 0.005 | 46.7 | 0.005 | 0.916 | 0.005 | 0.144 | 2.454 |
| 77 | 8 | 23 | 18 | 0.630 | 2.160 | 0.005 | 4.8 | 0.005 | 1.351 | 0.005 | 0.142 | 2.454 |
| 77 | 8 | 23 | 19 | 0.630 | 2.255 | 0.005 | 34.8 | 0.005 | 1.390 | 0.005 | 0.097 | 2.455 |
| 77 | 8 | 23 | 20 | 0.761 | 2.234 | 0.005 | 2.6 | 0.010 | 1.383 | 0.005 | 0.046 | 2.455 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 23 | 21 | 0.581 | 2.309 | 0.005 | 2.6 | 0.005 | 1.421 | 0.005 | 0.038 | 2.456 |
| 77 | 8 | 23 | 22 | 0.542 | 2.221 | 0.005 | 0.5 | 0.005 | 1.384 | 0.005 | 0.048 | 2.456 |
| 77 | 8 | 23 | 23 | 0.499 | 2.229 | 0.005 | 0.5 | 0.005 | 1.382 | 0.005 | 0.049 | 2.456 |
| 77 | 8 | 23 | 24 | 0.524 | 2.218 | 0.005 | 0.5 | 0.005 | 1.381 | 0.005 | 0.049 | 2.456 |
| 77 | 8 | 24 | 1 | 0.520 | 2.243 | 0.005 | 0.5 | 0.005 | 1.380 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 24 | 2 | 0.440 | 2.318 | 0.005 | 0.5 | 0.005 | 1.417 | 0.005 | 0.048 | 2.456 |
| 77 | 8 | 24 | 3 | 0.428 | 2.343 | 0.005 | 0.5 | 0.005 | 1.437 | 0.005 | 0.049 | 2.456 |
| 77 | 8 | 24 | 4 | 0.427 | 2.254 | 0.005 | 0.5 | 0.005 | 1.395 | 0.005 | 0.049 | 2.456 |
| 77 | 8 | 24 | 5 | 0.523 | 2.244 | 0.005 | 0.5 | 0.005 | 1.376 | 0.005 | 0.050 | 2.456 |
| 77 | 8 | 24 | 6 | 0.691 | 2.194 | 0.005 | 0.5 | 0.005 | 1.365 | 0.005 | 0.053 | 2.456 |
| 77 | 8 | 24 | 7 | 0.692 | 2.230 | 0.005 | 0.5 | 0.005 | 1.367 | 0.005 | 0.050 | 2.456 |
| 77 | 8 | 24 | 8 | 0.680 | 2.222 | 0.005 | 0.5 | 0.005 | 1.368 | 0.005 | 0.048 | 2.456 |
| 77 | 8 | 24 | 9 | 0.698 | 2.179 | 0.259 | 0.5 | 0.005 | 1.357 | 0.332 | 0.050 | 2.457 |
| 77 | 8 | 24 | 10 | 0.710 | 2.159 | 0.332 | 0.5 | 0.005 | 1.347 | 0.274 | 0.051 | 2.456 |
| 77 | 8 | 24 | 11 | 0.681 | 2.135 | 0.021 | 0.5 | 0.005 | 1.332 | 0.013 | 0.089 | 2.456 |
| 77 | 8 | 24 | 12 | 0.784 | 1.681 | 0.005 | 8.3 | 0.005 | 1.045 | 0.005 | 0.041 | 2.455 |
| 77 | 8 | 24 | 13 | 0.865 | 0.052 | 0.005 | 0.5 | 0.005 | 0.018 | 0.005 | 0.051 | 2.455 |
| 77 | 8 | 24 | 14 | 0.005 | 2.809 | 0.005 | 0.5 | 0.005 | 0.912 | 0.005 | 0.049 | 2.456 |
| 77 | 8 | 24 | 15 | 0.093 | 1.428 | 0.005 | 0.5 | 0.005 | 1.165 | 0.005 | 0.052 | 2.456 |
| 77 | 8 | 24 | 16 | 0.323 | 1.240 | 0.005 | 0.5 | 0.005 | 1.318 | 0.005 | 0.053 | 2.455 |
| 77 | 8 | 24 | 17 | 0.118 | 1.676 | 0.005 | 0.5 | 0.005 | 1.318 | 0.005 | 0.053 | 2.455 |
| 77 | 8 | 24 | 18 | 0.005 | 2.137 | 0.005 | 0.5 | 0.005 | 1.335 | 0.005 | 0.048 | 2.455 |
| 77 | 8 | 24 | 19 | 0.005 | 2.183 | 0.005 | 0.5 | 0.005 | 1.357 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 24 | 20 | 0.005 | 2.199 | 0.005 | 0.5 | 0.005 | 1.361 | 0.005 | 0.045 | 2.456 |
| 77 | 8 | 24 | 21 | 0.005 | 2.189 | 0.005 | 0.5 | 0.005 | 1.361 | 0.005 | 0.038 | 2.456 |
| 77 | 8 | 24 | 22 | 0.005 | 2.181 | 0.005 | 0.5 | 0.005 | 1.356 | 0.005 | 0.036 | 2.457 |
| 77 | 8 | 24 | 23 | 0.005 | 2.190 | 0.005 | 0.5 | 0.005 | 1.356 | 0.005 | 0.041 | 2.456 |
| 77 | 8 | 24 | 24 | 0.005 | 2.169 | 0.005 | 0.5 | 0.005 | 1.350 | 0.005 | 0.045 | 2.457 |
| 77 | 8 | 25 | 1 | 0.005 | 2.179 | 0.005 | 0.5 | 0.005 | 1.354 | 0.005 | 0.043 | 2.457 |
| 77 | 8 | 25 | 2 | 0.005 | 2.199 | 0.005 | 0.5 | 0.005 | 1.370 | 0.005 | 0.047 | 2.455 |
| 77 | 8 | 25 | 3 | 0.005 | 2.176 | 0.005 | 0.5 | 0.005 | 1.358 | 0.005 | 0.040 | 2.453 |
| 77 | 8 | 25 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 25 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 26 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 26 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 27 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | AC1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 28 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 16 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 17 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 18 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 19 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 20 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 21 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 22 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 23 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 28 | 24 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 1 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 2 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 3 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 4 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 5 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 6 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 7 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 8 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 9 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 10 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 11 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 12 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 13 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 14 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 15 | 999.900 | 999.900 | 999.900 | 999.9 | 999.900 | 999.900 | 999.900 | 999.900 | 999.900 |
| 77 | 8 | 29 | 16 | 0.110 | 2.078 | 0.005 | 3.2 | 0.112 | 1.304 | 0.005 | 0.038 | 2.464 |
| 77 | 8 | 29 | 17 | 0.018 | 2.091 | 0.005 | 5.4 | 0.017 | 1.331 | 0.005 | 0.040 | 2.464 |
| 77 | 8 | 29 | 18 | 0.012 | 2.092 | 0.005 | 5.4 | 0.012 | 1.334 | 0.005 | 0.043 | 2.461 |
| 77 | 8 | 29 | 19 | 0.011 | 2.115 | 0.005 | 5.1 | 0.011 | 1.352 | 0.005 | 0.042 | 2.461 |
| 77 | 8 | 29 | 20 | 0.005 | 2.141 | 0.005 | 5.0 | 0.005 | 1.366 | 0.005 | 0.041 | 2.462 |
| 77 | 8 | 29 | 21 | 0.011 | 2.159 | 0.005 | 4.9 | 0.011 | 1.372 | 0.005 | 0.040 | 2.462 |
| 77 | 8 | 29 | 22 | 0.013 | 2.158 | 0.005 | 4.9 | 0.012 | 1.374 | 0.005 | 0.037 | 2.462 |
| 77 | 8 | 29 | 23 | 0.015 | 2.165 | 0.005 | 4.8 | 0.014 | 1.378 | 0.005 | 0.037 | 2.462 |
| 77 | 8 | 29 | 24 | 0.013 | 2.166 | 0.005 | 4.8 | 0.013 | 1.376 | 0.005 | 0.037 | 2.463 |
| 77 | 8 | 30 | 1 | 0.013 | 2.172 | 0.005 | 4.7 | 0.012 | 1.378 | 0.005 | 0.034 | 2.462 |
| 77 | 8 | 30 | 2 | 0.015 | 2.176 | 0.005 | 4.7 | 0.014 | 1.363 | 0.005 | 0.032 | 2.461 |
| 77 | 8 | 30 | 3 | 0.016 | 2.180 | 0.005 | 4.7 | 0.015 | 1.384 | 0.005 | 0.031 | 2.461 |
| 77 | 8 | 30 | 4 | 0.021 | 2.182 | 0.005 | 4.7 | 0.020 | 1.387 | 0.005 | 0.032 | 2.460 |
| 77 | 8 | 30 | 5 | 0.017 | 2.171 | 0.005 | 4.7 | 0.017 | 1.383 | 0.005 | 0.032 | 2.459 |
| 77 | 8 | 30 | 6 | 0.017 | 2.173 | 0.005 | 4.7 | 0.017 | 1.385 | 0.005 | 0.037 | 2.460 |
| 77 | 8 | 30 | 7 | 0.018 | 2.172 | 0.005 | 4.7 | 0.018 | 1.385 | 0.005 | 0.041 | 2.460 |
| 77 | 8 | 30 | 8 | 0.019 | 2.172 | 0.005 | 4.7 | 0.018 | 1.385 | 0.005 | 0.042 | 2.459 |
| 77 | 8 | 30 | 9 | 0.021 | 2.169 | 0.005 | 4.7 | 0.020 | 1.383 | 0.005 | 0.042 | 2.459 |
| 77 | 8 | 30 | 10 | 0.023 | 2.160 | 0.005 | 4.7 | 0.022 | 1.376 | 0.005 | 0.039 | 2.459 |
| 77 | 8 | 30 | 11 | 0.019 | 2.147 | 0.005 | 4.7 | 0.018 | 1.370 | 0.005 | 0.035 | 2.460 |
| 77 | 8 | 30 | 12 | 0.018 | 2.131 | 0.005 | 4.7 | 0.018 | 1.358 | 0.005 | 0.036 | 2.458 |
| 77 | 8 | 30 | 13 | 0.018 | 2.106 | 0.005 | 4.8 | 0.018 | 1.346 | 0.005 | 0.036 | 2.455 |
| 77 | 8 | 30 | 14 | 0.022 | 2.098 | 0.005 | 4.9 | 0.021 | 1.343 | 0.005 | 0.038 | 2.455 |
| 77 | 8 | 30 | 15 | 0.021 | 2.103 | 0.013 | 4.9 | 0.021 | 1.344 | 0.012 | 0.036 | 2.455 |
| 77 | 8 | 30 | 16 | 0.020 | 2.106 | 0.029 | 4.8 | 0.021 | 1.351 | 0.031 | 0.033 | 2.456 |
| 77 | 8 | 30 | 17 | 0.022 | 2.119 | 0.015 | 4.8 | 0.022 | 1.356 | 0.016 | 0.032 | 2.456 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | SO2 | THC | NOX | CO | H2S | CH4 | NO | O3 | ACI |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 30 | 18 | 0.024 | 2.128 | 0.010 | 4.8 | 0.023 | 1.363 | 0.012 | 0.031 | 2.457 |
| 77 | 8 | 30 | 19 | 0.029 | 2.151 | 0.005 | 4.7 | 0.027 | 1.372 | 0.005 | 0.029 | 2.457 |
| 77 | 8 | 30 | 20 | 0.029 | 2.164 | 0.005 | 4.6 | 0.027 | 1.388 | 0.005 | 0.030 | 2.455 |
| 77 | 8 | 30 | 21 | 0.025 | 2.171 | 0.005 | 4.6 | 0.024 | 1.385 | 0.005 | 0.030 | 2.457 |
| 77 | 8 | 30 | 22 | 0.028 | 2.180 | 0.005 | 4.6 | 0.027 | 1.388 | 0.005 | 0.033 | 2.456 |
| 77 | 8 | 30 | 23 | 0.030 | 2.180 | 0.005 | 4.5 | 0.029 | 1.390 | 0.005 | 0.034 | 2.457 |
| 77 | 8 | 30 | 24 | 0.030 | 2.193 | 0.005 | 4.5 | 0.030 | 1.388 | 0.005 | 0.030 | 2.457 |
| 77 | 8 | 31 | 1 | 0.030 | 2.195 | 0.005 | 4.5 | 0.029 | 1.388 | 0.005 | 0.026 | 2.456 |
| 77 | 8 | 31 | 2 | 0.026 | 2.189 | 0.005 | 4.5 | 0.026 | 1.392 | 0.005 | 0.024 | 2.456 |
| 77 | 8 | 31 | 3 | 0.027 | 2.199 | 0.005 | 4.4 | 0.027 | 1.399 | 0.005 | 0.024 | 2.456 |
| 77 | 8 | 31 | 4 | 0.026 | 2.210 | 0.005 | 4.4 | 0.025 | 1.408 | 0.005 | 0.028 | 2.457 |
| 77 | 8 | 31 | 5 | 0.030 | 2.219 | 0.005 | 4.4 | 0.029 | 1.413 | 0.005 | 0.031 | 2.456 |
| 77 | 8 | 31 | 6 | 0.033 | 2.216 | 0.005 | 4.4 | 0.031 | 1.412 | 0.005 | 0.031 | 2.457 |
| 77 | 8 | 31 | 7 | 0.029 | 2.263 | 0.005 | 4.4 | 0.028 | 1.413 | 0.005 | 0.032 | 2.458 |
| 77 | 8 | 31 | 8 | 0.027 | 2.238 | 0.005 | 4.5 | 0.027 | 1.403 | 0.005 | 0.033 | 2.457 |
| 77 | 8 | 31 | 9 | 0.030 | 2.196 | 0.005 | 4.5 | 0.029 | 1.397 | 0.005 | 0.034 | 2.457 |
| 77 | 8 | 31 | 10 | 0.031 | 2.180 | 0.005 | 4.5 | 0.031 | 1.388 | 0.005 | 0.037 | 2.455 |
| 77 | 8 | 31 | 11 | 0.033 | 2.184 | 0.005 | 4.5 | 0.032 | 1.390 | 0.005 | 0.039 | 2.455 |
| 77 | 8 | 31 | 12 | 0.033 | 2.181 | 0.005 | 4.5 | 0.033 | 1.387 | 0.005 | 0.043 | 2.456 |
| 77 | 8 | 31 | 13 | 0.028 | 2.172 | 0.005 | 4.5 | 0.028 | 1.382 | 0.005 | 0.047 | 2.455 |
| 77 | 8 | 31 | 14 | 0.029 | 2.153 | 0.005 | 4.5 | 0.029 | 1.372 | 0.005 | 0.050 | 2.454 |
| 77 | 8 | 31 | 15 | 0.027 | 1.757 | 0.005 | 4.4 | 0.026 | 1.159 | 0.005 | 0.049 | 2.454 |
| 77 | 8 | 31 | 16 | 0.030 | 2.165 | 0.005 | 11.8 | 0.028 | 1.376 | 0.005 | 0.044 | 2.454 |
| 77 | 8 | 31 | 17 | 0.021 | 1.574 | 0.005 | 4.4 | 0.020 | 0.960 | 0.005 | 0.043 | 2.453 |
| 77 | 8 | 31 | 18 | 0.032 | 2.132 | 0.005 | 4.4 | 0.031 | 1.357 | 0.005 | 0.041 | 2.455 |
| 77 | 8 | 31 | 19 | 0.029 | 2.158 | 0.005 | 4.3 | 0.029 | 1.372 | 0.005 | 0.041 | 2.453 |
| 77 | 8 | 31 | 20 | 0.027 | 2.180 | 0.005 | 4.2 | 0.025 | 1.384 | 0.005 | 0.044 | 2.453 |
| 77 | 8 | 31 | 21 | 0.027 | 2.186 | 0.005 | 4.2 | 0.025 | 1.389 | 0.005 | 0.046 | 2.454 |
| 77 | 8 | 31 | 22 | 0.026 | 2.186 | 0.005 | 4.2 | 0.025 | 1.389 | 0.005 | 0.045 | 2.453 |
| 77 | 8 | 31 | 23 | 0.025 | 2.186 | 0.005 | 4.2 | 0.024 | 1.389 | 0.005 | 0.042 | 2.454 |
| 77 | 8 | 31 | 24 | 0.026 | 2.183 | 0.005 | 4.2 | 0.025 | 1.389 | 0.005 | 0.040 | 2.455 |
| 77 | 9 | 1 | 1 | 0.025 | 2.184 | 0.005 | 4.2 | 0.023 | 1.389 | 0.005 | 0.038 | 2.456 |
| 77 | 9 | 1 | 2 | 0.026 | 2.175 | 0.005 | 4.2 | 0.024 | 1.386 | 0.005 | 0.035 | 2.457 |
| 77 | 9 | 1 | 3 | 0.026 | 2.175 | 0.005 | 4.2 | 0.024 | 1.385 | 0.005 | 0.034 | 2.457 |
| 77 | 9 | 1 | 4 | 0.026 | 2.180 | 0.005 | 4.2 | 0.025 | 1.388 | 0.005 | 0.034 | 2.456 |
| 77 | 9 | 1 | 5 | 0.028 | 2.187 | 0.005 | 4.2 | 0.027 | 1.390 | 0.005 | 0.034 | 2.455 |
| 77 | 9 | 1 | 6 | 0.028 | 2.196 | 0.005 | 4.2 | 0.025 | 1.395 | 0.005 | 0.033 | 2.457 |
| 77 | 9 | 1 | 7 | 0.027 | 2.190 | 0.005 | 4.2 | 0.025 | 1.394 | 0.005 | 0.034 | 2.456 |
| 77 | 9 | 1 | 8 | 0.027 | 2.190 | 0.005 | 4.0 | 0.025 | 1.393 | 0.005 | 0.037 | 2.454 |
| 77 | 9 | 1 | 9 | 0.027 | 2.202 | 0.005 | 4.1 | 0.026 | 1.399 | 0.005 | 0.042 | 2.456 |
| 77 | 9 | 1 | 10 | 0.030 | 2.167 | 0.005 | 4.2 | 0.031 | 1.381 | 0.005 | 0.042 | 2.457 |
| 77 | 9 | 1 | 11 | 0.034 | 2.155 | 0.005 | 4.3 | 0.033 | 1.370 | 0.005 | 0.042 | 2.456 |
| 77 | 9 | 1 | 12 | 0.033 | 2.157 | 0.005 | 4.2 | 0.033 | 1.373 | 0.005 | 0.043 | 2.456 |
| 77 | 9 | 1 | 13 | 0.034 | 2.160 | 0.005 | 4.2 | 0.033 | 1.374 | 0.005 | 0.044 | 2.457 |
| 77 | 9 | 1 | 14 | 0.034 | 2.154 | 0.005 | 4.2 | 0.033 | 1.371 | 0.005 | 0.044 | 2.456 |
| 77 | 9 | 1 | 15 | 0.032 | 2.138 | 0.005 | 4.0 | 0.031 | 1.363 | 0.005 | 0.042 | 2.456 |
| 77 | 9 | 1 | 16 | 0.034 | 2.134 | 0.005 | 4.0 | 0.033 | 1.362 | 0.005 | 0.043 | 2.455 |
| 77 | 9 | 1 | 17 | 0.035 | 2.136 | 0.005 | 4.0 | 0.034 | 1.364 | 0.005 | 0.043 | 2.456 |
| 77 | 9 | 1 | 18 | 0.034 | 2.146 | 0.005 | 4.1 | 0.033 | 1.370 | 0.005 | 0.042 | 2.457 |
| 77 | 9 | 1 | 19 | 0.027 | 2.165 | 0.005 | 4.0 | 0.027 | 1.380 | 0.005 | 0.041 | 2.457 |
| 77 | 9 | 1 | 20 | 0.023 | 2.186 | 0.005 | 4.0 | 0.023 | 1.392 | 0.005 | 0.039 | 2.456 |
| 77 | 9 | 1 | 21 | 0.023 | 2.192 | 0.005 | 3.9 | 0.022 | 1.397 | 0.005 | 0.040 | 2.456 |
| 77 | 9 | 1 | 22 | 0.023 | 2.183 | 0.005 | 3.9 | 0.021 | 1.394 | 0.005 | 0.041 | 2.457 |
| 77 | 9 | 1 | 23 | 0.024 | 2.186 | 0.005 | 4.0 | 0.022 | 1.395 | 0.005 | 0.041 | 2.456 |
| 77 | 9 | 1 | 24 | 0.025 | 2.187 | 0.005 | 3.9 | 0.023 | 1.391 | 0.005 | 0.040 | 2.457 |

# APPENDIX B

# METEOROLOGY

## RIO BLANCO OIL SHALF PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 2 | 6 | 13 | 6.2 | 67.6 | 6.8 | 58.4 | 7.7 | 61.7 | 0.7 | 1.2 | 0.3 | 22.0 | -0.37 | 3.76 | 0.83 |
| 77 | 2 | 6 | 14 | 8.7 | 60.8 | 9.5 | 54.8 | 10.5 | 55.4 | 1.2 | 1.4 | 0.7 | 22.9 | -0.49 | 3.76 | 0.79 |
| 77 | 2 | 6 | 15 | 5.7 | 58.4 | 6.7 | 52.0 | 6.8 | 50.4 | 1.9 | 2.3 | 1.5 | 22.3 | -0.42 | 3.76 | 0.65 |
| 77 | 2 | 6 | 16 | 4.6 | 63.8 | 5.0 | 54.0 | 5.8 | 47.7 | 2.2 | 2.7 | 1.8 | 21.8 | -0.36 | 3.76 | 0.45 |
| 77 | 2 | 6 | 17 | 5.4 | 353.4 | 6.2 | 351.1 | 6.2 | 358.7 | 1.8 | 2.2 | 1.4 | 24.1 | -0.41 | 3.76 | 0.19 |
| 77 | 2 | 6 | 18 | 4.7 | 285.9 | 5.1 | 298.2 | 5.8 | 331.0 | 0.1 | 0.3 | 0.2 | 25.4 | 0.07 | 3.76 | 0.03 |
| 77 | 2 | 6 | 19 | 3.3 | 302.2 | 3.6 | 314.2 | 3.5 | 334.6 | 0.2 | -0.0 | 0.2 | 26.2 | -0.07 | 3.76 | 0.01 |
| 77 | 2 | 6 | 20 | 4.1 | 311.2 | 3.8 | 321.5 | 3.8 | 339.8 | -0.1 | -0.1 | -0.2 | 26.2 | -0.10 | 3.76 | 0.01 |
| 77 | 2 | 6 | 21 | 3.8 | 296.3 | 4.1 | 307.9 | 4.1 | 331.2 | -0.8 | -0.8 | -0.8 | 26.8 | -0.08 | 3.76 | 0.01 |
| 77 | 2 | 6 | 22 | 1.6 | 220.9 | 1.3 | 338.1 | 1.6 | 23.7 | -0.7 | -2.7 | -0.6 | 27.1 | 0.18 | 3.76 | 0.01 |
| 77 | 2 | 6 | 23 | 1.5 | 237.1 | 1.7 | 277.0 | 1.5 | 222.2 | -0.9 | -2.7 | -0.8 | 27.6 | 0.09 | 3.76 | 0.01 |
| 77 | 2 | 6 | 24 | 4.0 | 304.5 | 3.9 | 324.1 | 3.2 | 346.6 | -1.1 | -1.1 | -0.9 | 26.5 | 0.29 | 3.76 | 0.01 |
| 77 | 2 | 7 | 1 | 2.4 | 88.0 | 2.5 | 51.6 | 2.3 | 66.0 | -2.1 | -3.3 | -1.6 | 27.1 | 0.47 | 3.76 | 0.01 |
| 77 | 2 | 7 | 2 | 2.6 | 291.5 | 1.2 | 344.5 | 2.3 | 161.5 | -3.5 | -6.0 | -3.0 | 27.7 | 0.52 | 3.76 | 0.01 |
| 77 | 2 | 7 | 3 | 2.3 | 301.9 | 1.2 | 343.1 | 1.1 | 145.0 | -3.3 | -6.1 | -2.8 | 27.5 | 0.47 | 3.76 | 0.01 |
| 77 | 2 | 7 | 4 | 1.0 | 254.7 | 1.0 | 338.7 | 0.9 | 181.8 | -3.2 | -6.8 | -3.2 | 29.0 | -0.00 | 3.76 | 0.01 |
| 77 | 2 | 7 | 5 | 1.3 | 172.3 | 1.9 | 93.5 | 2.2 | 171.3 | -3.5 | -5.6 | -3.5 | 29.5 | 0.01 | 3.76 | 0.01 |
| 77 | 2 | 7 | 6 | 0.9 | 228.4 | 1.1 | 339.9 | 2.0 | 184.2 | -4.1 | -7.7 | -3.9 | 29.5 | 0.17 | 3.76 | 0.01 |
| 77 | 2 | 7 | 7 | 4.3 | 218.6 | 4.3 | 205.8 | 3.0 | 236.9 | -3.8 | -3.6 | -3.3 | 28.8 | 0.47 | 3.76 | 0.01 |
| 77 | 2 | 7 | 8 | 3.9 | 229.6 | 4.1 | 213.7 | 3.9 | 205.2 | -2.8 | -2.0 | -2.5 | 27.8 | 0.28 | 3.76 | 0.05 |
| 77 | 2 | 7 | 9 | 2.9 | 100.2 | 3.2 | 124.0 | 3.6 | 175.0 | -1.7 | -0.2 | -1.6 | 24.7 | 0.14 | 3.76 | 0.26 |
| 77 | 2 | 7 | 10 | 3.9 | 80.8 | 4.1 | 76.8 | 4.4 | 102.6 | -0.5 | 0.6 | -0.7 | 22.7 | -0.25 | 3.76 | 0.50 |
| 77 | 2 | 7 | 11 | 5.2 | 79.2 | 5.5 | 74.7 | 5.5 | 83.5 | 0.2 | 0.7 | -0.1 | 22.5 | -0.29 | 3.76 | 0.70 |
| 77 | 2 | 7 | 12 | 4.9 | 79.4 | 5.0 | 72.5 | 4.4 | 77.2 | 30.7 | 2.1 | 31.6 | 20.6 | 0.92 | 3.76 | 0.79 |
| 77 | 2 | 7 | 13 | 3.6 | 61.4 | 3.5 | 47.0 | 4.0 | 52.6 | 31.1 | 4.4 | 36.6 | 19.9 | 5.45 | 3.76 | 0.84 |
| 77 | 2 | 7 | 14 | 5.5 | 348.0 | 6.0 | 348.2 | 6.6 | 342.7 | 31.2 | 4.3 | 34.4 | 21.7 | 3.18 | 3.76 | 0.80 |
| 77 | 2 | 7 | 15 | 4.9 | 331.8 | 5.3 | 339.9 | 5.1 | 336.4 | 31.1 | 4.3 | 31.2 | 22.0 | 0.01 | 3.76 | 0.67 |
| 77 | 2 | 7 | 16 | 4.7 | 85.9 | 5.2 | 74.2 | 5.8 | 73.0 | 3.5 | 3.9 | 3.1 | 20.9 | -0.39 | 3.76 | 0.46 |
| 77 | 2 | 7 | 17 | 4.6 | 40.7 | 6.5 | 32.5 | 7.0 | 35.2 | 2.6 | 3.2 | 2.5 | 22.6 | -0.02 | 3.76 | 0.20 |
| 77 | 2 | 7 | 18 | 0.9 | 195.5 | 2.7 | 134.8 | 2.3 | 104.6 | 1.3 | -0.1 | 1.6 | 25.3 | 0.27 | 3.76 | 0.03 |
| 77 | 2 | 7 | 19 | 3.6 | 217.7 | 3.2 | 206.5 | 3.0 | 190.1 | 0.9 | 1.1 | 1.3 | 25.3 | 0.43 | 3.76 | 0.01 |
| 77 | 2 | 7 | 20 | 3.6 | 206.0 | 4.1 | 190.9 | 4.3 | 182.2 | 0.8 | 0.9 | 1.3 | 26.7 | 0.48 | 3.76 | 0.01 |
| 77 | 2 | 7 | 21 | 5.0 | 224.3 | 5.1 | 202.3 | 5.6 | 183.7 | 0.7 | 0.8 | 0.8 | 26.3 | 0.14 | 3.76 | 0.01 |
| 77 | 2 | 7 | 22 | 2.6 | 350.4 | 2.1 | 5.6 | 1.9 | 10.2 | 0.5 | -1.2 | 1.0 | 27.1 | 0.53 | 3.76 | 0.01 |
| 77 | 2 | 7 | 23 | 3.3 | 278.0 | 3.1 | 305.8 | 2.3 | 335.6 | 0.1 | -1.1 | 0.7 | 26.5 | 0.57 | 3.76 | 0.01 |
| 77 | 2 | 7 | 24 | 2.2 | 280.7 | 2.9 | 309.0 | 1.8 | 309.0 | -0.9 | -1.1 | -0.3 | 26.6 | 0.64 | 3.76 | 0.01 |
| 77 | 2 | 8 | 1 | 8.7 | 244.6 | 9.3 | 243.8 | 8.7 | 245.1 | 0.2 | 1.4 | 1.3 | 25.9 | 1.15 | 3.76 | 0.01 |
| 77 | 2 | 8 | 2 | 7.0 | 233.3 | 6.7 | 226.3 | 7.2 | 233.7 | 0.5 | 1.1 | 1.0 | 25.8 | 0.53 | 3.76 | 0.01 |
| 77 | 2 | 8 | 3 | 3.4 | 191.9 | 4.4 | 223.4 | 4.8 | 220.9 | -0.2 | 0.5 | 0.7 | 28.4 | 0.88 | 3.76 | 0.01 |
| 77 | 2 | 8 | 4 | 1.9 | 16.1 | 2.1 | 338.6 | 2.9 | 235.6 | -1.3 | -2.3 | -0.1 | 28.0 | 1.22 | 3.76 | 0.01 |
| 77 | 2 | 8 | 5 | 1.7 | 224.8 | 1.9 | 33.6 | 2.7 | 91.4 | -1.7 | -3.1 | -1.1 | 27.9 | 0.64 | 3.76 | 0.01 |
| 77 | 2 | 8 | 6 | 2.1 | 323.1 | 2.3 | 10.5 | 2.6 | 57.1 | -1.6 | -2.5 | -1.0 | 27.5 | 0.63 | 3.76 | 0.01 |
| 77 | 2 | 8 | 7 | 1.0 | 283.4 | 2.6 | 327.8 | 2.1 | 112.5 | -3.0 | -4.4 | -2.3 | 28.4 | 0.75 | 3.76 | 0.01 |
| 77 | 2 | 8 | 8 | 2.2 | 292.6 | 1.5 | 357.2 | 1.6 | 19.2 | -2.3 | -1.9 | -1.8 | 26.9 | 0.48 | 3.76 | 0.05 |
| 77 | 2 | 8 | 9 | 1.1 | 87.5 | 1.7 | 54.9 | 1.5 | 208.2 | -0.5 | 1.1 | -0.4 | 24.4 | 0.16 | 3.76 | 0.26 |
| 77 | 2 | 8 | 10 | 4.7 | 97.6 | 5.2 | 98.4 | 5.0 | 124.4 | 0.6 | 1.4 | 0.4 | 22.5 | -0.18 | 3.76 | 0.51 |
| 77 | 2 | 8 | 11 | 4.7 | 91.2 | 5.4 | 88.0 | 6.0 | 106.4 | 2.2 | 2.6 | 1.8 | 21.9 | -0.35 | 3.76 | 0.70 |
| 77 | 2 | 8 | 12 | 5.0 | 27.2 | 5.5 | 30.4 | 6.0 | 47.4 | 4.1 | 4.7 | 3.6 | 21.3 | -0.51 | 3.76 | 0.80 |
| 77 | 2 | 8 | 13 | 6.3 | 271.1 | 6.9 | 270.9 | 6.9 | 273.1 | 5.2 | 5.4 | 4.8 | 20.8 | -0.44 | 3.76 | 0.86 |
| 77 | 2 | 8 | 14 | 7.7 | 260.6 | 8.6 | 257.8 | 9.2 | 257.7 | 5.4 | 5.5 | 4.9 | 21.3 | -0.50 | 3.76 | 0.82 |
| 77 | 2 | 8 | 15 | 8.6 | 273.3 | 9.5 | 268.2 | 8.9 | 268.5 | 5.8 | 5.8 | 5.2 | 21.5 | -0.59 | 3.76 | 0.68 |
| 77 | 2 | 8 | 16 | 4.6 | 252.3 | 5.4 | 251.0 | 5.9 | 243.7 | 6.0 | 6.7 | 5.6 | 21.0 | -0.44 | 3.76 | 0.47 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 2 | 8 | 17 | 4.6 | 221.6 | 6.2 | 220.0 | 7.5 | 227.8 | 5.6 | 6.4 | 5.4 | 21.6 | -0.23 | 3.76 | 0.21 |
| 77 | 2 | 8 | 18 | 4.1 | 177.1 | 5.2 | 154.4 | 5.2 | 142.1 | 3.2 | 3.7 | 3.6 | 24.4 | 0.44 | 3.76 | 0.03 |
| 77 | 2 | 8 | 19 | 4.1 | 207.1 | 4.1 | 192.0 | 3.4 | 200.3 | 2.7 | 2.8 | 2.9 | 25.2 | 0.19 | 3.76 | 0.01 |
| 77 | 2 | 8 | 20 | 6.0 | 305.1 | 4.7 | 325.6 | 3.7 | 2.4 | 2.0 | 2.4 | 2.5 | 24.8 | 0.53 | 3.76 | 0.01 |
| 77 | 2 | 8 | 21 | 0.9 | 139.7 | 1.0 | 46.8 | 1.3 | 143.2 | 2.0 | -1.4 | 2.3 | 26.2 | 0.24 | 3.76 | 0.01 |
| 77 | 2 | 8 | 22 | 1.6 | 202.4 | 1.9 | 223.3 | 1.8 | 234.1 | 2.0 | -1.4 | 1.9 | 26.4 | -0.09 | 3.76 | 0.01 |
| 77 | 2 | 8 | 23 | 1.5 | 223.7 | 2.0 | 68.6 | 1.4 | 77.2 | 1.2 | -0.6 | 1.7 | 26.0 | 0.51 | 3.76 | 0.01 |
| 77 | 2 | 8 | 24 | 5.6 | 234.0 | 5.4 | 228.8 | 5.1 | 224.3 | 2.3 | 2.3 | 2.4 | 25.3 | 0.10 | 3.76 | 0.01 |
| 77 | 2 | 9 | 1 | 6.5 | 257.5 | 6.4 | 235.0 | 5.9 | 240.0 | 2.1 | 2.2 | 2.1 | 25.5 | -0.01 | 3.76 | 0.01 |
| 77 | 2 | 9 | 2 | 5.9 | 277.7 | 6.0 | 285.8 | 6.3 | 291.2 | 1.0 | 1.3 | 1.0 | 25.9 | -0.04 | 3.76 | 0.01 |
| 77 | 2 | 9 | 3 | 7.0 | 253.7 | 7.0 | 257.7 | 7.1 | 268.9 | 0.5 | 1.0 | 0.8 | 26.3 | 0.26 | 3.76 | 0.01 |
| 77 | 2 | 9 | 4 | 3.6 | 211.0 | 3.0 | 229.9 | 3.1 | 217.9 | 0.1 | 0.5 | 1.0 | 26.2 | 0.94 | 3.76 | 0.01 |
| 77 | 2 | 9 | 5 | 0.9 | 337.5 | 1.5 | 38.1 | 2.2 | 108.8 | -0.9 | -3.7 | -0.4 | 27.7 | 0.48 | 3.76 | 0.01 |
| 77 | 2 | 9 | 6 | 0.9 | 272.9 | 1.9 | 310.3 | 1.4 | 204.6 | -1.3 | -3.5 | -0.9 | 27.0 | 0.41 | 3.76 | 0.01 |
| 77 | 2 | 9 | 7 | 0.9 | 219.6 | 2.9 | 201.7 | 2.6 | 168.2 | -1.0 | -1.4 | -0.9 | 27.1 | 0.11 | 3.76 | 0.01 |
| 77 | 2 | 9 | 8 | 0.9 | 201.3 | 1.7 | 332.7 | 2.1 | 160.2 | -0.2 | 0.3 | -0.0 | 26.2 | 0.17 | 3.76 | 0.06 |
| 77 | 2 | 9 | 9 | 0.9 | 73.9 | 2.3 | 55.6 | 1.6 | 41.5 | 0.4 | 2.2 | 0.8 | 23.7 | 0.31 | 3.76 | 0.28 |
| 77 | 2 | 9 | 10 | 0.9 | 87.9 | 2.9 | 76.6 | 3.0 | 71.4 | 0.4 | 2.9 | 0.4 | 22.2 | -0.00 | 3.76 | 0.52 |
| 77 | 2 | 9 | 11 | 3.9 | 90.5 | 5.2 | 76.8 | 5.8 | 65.1 | 1.2 | 1.6 | 1.0 | 22.1 | -0.12 | 3.76 | 0.72 |
| 77 | 2 | 9 | 12 | 5.7 | 81.9 | 7.0 | 73.3 | 7.5 | 71.6 | 2.5 | 2.8 | 2.2 | 21.6 | -0.38 | 3.76 | 0.82 |
| 77 | 2 | 9 | 13 | 5.2 | 71.0 | 6.7 | 63.6 | 7.1 | 64.1 | 3.5 | 3.9 | 3.3 | 21.4 | -0.27 | 3.76 | 0.87 |
| 77 | 2 | 9 | 14 | 4.1 | 6.2 | 5.5 | 2.2 | 6.0 | 4.8 | 4.5 | 4.8 | 3.9 | 21.8 | -0.59 | 3.76 | 0.82 |
| 77 | 2 | 9 | 15 | 5.0 | 31.0 | 7.3 | 30.8 | 7.7 | 33.1 | 4.8 | 5.1 | 4.2 | 21.4 | -0.55 | 3.76 | 0.67 |
| 77 | 2 | 9 | 16 | 5.1 | 45.8 | 6.7 | 38.1 | 7.4 | 34.3 | 4.5 | 4.9 | 4.1 | 21.7 | -0.41 | 3.76 | 0.47 |
| 77 | 2 | 9 | 17 | 5.9 | 333.2 | 8.2 | 331.1 | 7.7 | 342.8 | 3.7 | 4.3 | 3.6 | 23.1 | -0.13 | 3.76 | 0.23 |
| 77 | 2 | 9 | 18 | 5.1 | 301.7 | 6.9 | 319.5 | 8.5 | 355.3 | 1.3 | 1.9 | 2.2 | 25.3 | 0.94 | 3.76 | 0.03 |
| 77 | 2 | 9 | 19 | 6.4 | 307.5 | 8.8 | 340.6 | 12.5 | 14.0 | 0.2 | 1.5 | 2.6 | 26.5 | 2.46 | 3.76 | 0.01 |
| 77 | 2 | 9 | 20 | 4.3 | 312.4 | 5.9 | 339.7 | 7.0 | 16.6 | 1.4 | 1.8 | 2.0 | 25.4 | 0.60 | 3.76 | 0.01 |
| 77 | 2 | 9 | 21 | 5.9 | 304.0 | 9.1 | 336.9 | 11.0 | 8.6 | -0.4 | 1.3 | 1.9 | 25.8 | 2.27 | 3.76 | 0.01 |
| 77 | 2 | 9 | 22 | 3.8 | 308.9 | 7.6 | 341.7 | 11.1 | 7.9 | -1.1 | -0.1 | 0.8 | 26.8 | 1.87 | 3.76 | 0.01 |
| 77 | 2 | 9 | 23 | 2.8 | 344.4 | 6.5 | 13.7 | 9.2 | 22.9 | -0.8 | 0.1 | 0.3 | 26.3 | 1.11 | 3.76 | 0.01 |
| 77 | 2 | 9 | 24 | 4.6 | 314.4 | 7.0 | 343.5 | 10.7 | 11.8 | -1.6 | -0.6 | -0.1 | 26.6 | 1.51 | 3.76 | 0.01 |
| 77 | 2 | 10 | 1 | 4.3 | 314.0 | 6.3 | 354.7 | 9.1 | 16.3 | -1.7 | -0.9 | -0.4 | 27.0 | 1.25 | 3.76 | 0.01 |
| 77 | 2 | 10 | 2 | 4.7 | 304.5 | 6.7 | 342.0 | 10.3 | 12.5 | -2.2 | -1.4 | -0.8 | 27.4 | 1.43 | 3.76 | 0.01 |
| 77 | 2 | 10 | 3 | 6.0 | 321.4 | 9.3 | 351.6 | 13.1 | 11.9 | -2.8 | -1.5 | -1.1 | 27.2 | 1.74 | 3.76 | 0.01 |
| 77 | 2 | 10 | 4 | 4.8 | 320.0 | 7.8 | 359.6 | 12.4 | 18.6 | -3.0 | -2.1 | -1.4 | 27.7 | 1.60 | 3.76 | 0.01 |
| 77 | 2 | 10 | 5 | 4.7 | 323.6 | 7.5 | 359.9 | 11.2 | 22.1 | -3.2 | -2.4 | -1.9 | 27.8 | 1.23 | 3.76 | 0.01 |
| 77 | 2 | 10 | 6 | 4.5 | 307.4 | 6.5 | 341.3 | 9.3 | 11.2 | -3.9 | -3.3 | -2.8 | 27.9 | 1.15 | 3.76 | 0.01 |
| 77 | 2 | 10 | 7 | 0.9 | 299.0 | 2.3 | 358.2 | 4.8 | 21.7 | -3.0 | -3.6 | -2.9 | 28.1 | 0.13 | 3.76 | 0.01 |
| 77 | 2 | 10 | 8 | 1.1 | 304.1 | 4.0 | 333.5 | 5.3 | 7.8 | -3.0 | -2.5 | -2.9 | 27.7 | 0.14 | 3.76 | 0.06 |
| 77 | 2 | 10 | 9 | 7.8 | 24.5 | 10.0 | 24.1 | 10.7 | 22.9 | -1.0 | -0.7 | -1.4 | 26.0 | -0.38 | 3.76 | 0.27 |
| 77 | 2 | 10 | 10 | 6.6 | 64.6 | 7.7 | 59.0 | 7.1 | 58.2 | -0.0 | 0.4 | -0.4 | 24.2 | -0.36 | 3.76 | 0.52 |
| 77 | 2 | 10 | 11 | 6.6 | 57.7 | 8.2 | 50.9 | 7.9 | 50.2 | 1.0 | 1.4 | 0.6 | 23.3 | -0.42 | 3.76 | 0.71 |
| 77 | 2 | 10 | 12 | 6.6 | 60.8 | 8.3 | 55.8 | 8.6 | 55.3 | 2.0 | 2.4 | 1.6 | 22.8 | -0.42 | 3.76 | 0.82 |
| 77 | 2 | 10 | 13 | 5.7 | 75.7 | 7.0 | 64.9 | 7.8 | 69.9 | 3.3 | 3.7 | 2.8 | 21.6 | -0.48 | 3.76 | 0.86 |
| 77 | 2 | 10 | 14 | 8.2 | 64.4 | 10.1 | 58.9 | 10.6 | 55.5 | 4.0 | 4.3 | 3.5 | 21.8 | -0.42 | 3.76 | 0.82 |
| 77 | 2 | 10 | 15 | 10.5 | 53.7 | 11.8 | 47.7 | 12.1 | 42.7 | 4.5 | 4.7 | 4.0 | 23.2 | -0.49 | 3.76 | 0.69 |
| 77 | 2 | 10 | 16 | 5.6 | 65.3 | 7.8 | 61.1 | 7.8 | 58.1 | 4.5 | 4.9 | 4.1 | 22.9 | -0.40 | 3.76 | 0.44 |
| 77 | 2 | 10 | 17 | 7.1 | 24.7 | 8.9 | 22.5 | 9.1 | 24.1 | 4.0 | 4.5 | 3.8 | 24.1 | -0.22 | 3.76 | 0.23 |
| 77 | 2 | 10 | 18 | 5.5 | 301.7 | 6.3 | 324.5 | 6.2 | 352.7 | 2.4 | 3.0 | 3.0 | 25.7 | 0.54 | 3.76 | 0.03 |
| 77 | 2 | 10 | 19 | 4.0 | 285.4 | 4.6 | 303.1 | 3.9 | 321.3 | 2.7 | 2.8 | 2.7 | 25.9 | -0.02 | 3.76 | 0.01 |
| 77 | 2 | 10 | 20 | 5.5 | 301.2 | 6.8 | 328.4 | 7.3 | 9.0 | 1.7 | 2.5 | 2.8 | 26.4 | 1.10 | 3.76 | 0.01 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 2 | 10 | 21 | 4.0 | 289.9 | 4.5 | 313.3 | 4.5 | 1.9 | 2.0 | 2.2 | 2.4 | 26.3 | 0.44 | 3.76 | 0.01 |
| 77 | 2 | 10 | 22 | 6.0 | 305.3 | 6.9 | 323.2 | 6.7 | 359.9 | 0.8 | 1.6 | 1.8 | 27.5 | 1.02 | 3.76 | 0.01 |
| 77 | 2 | 10 | 23 | 0.9 | 259.3 | 2.7 | 303.0 | 5.1 | 343.2 | -0.5 | -0.6 | 0.6 | 27.8 | 1.07 | 3.76 | 0.01 |
| 77 | 2 | 10 | 24 | 0.9 | 273.6 | 3.7 | 283.8 | 1.8 | 233.8 | 0.6 | 0.3 | 0.9 | 27.2 | 0.32 | 3.76 | 0.01 |
| 77 | 2 | 11 | 1 | 3.0 | 245.1 | 5.7 | 283.7 | 6.0 | 305.9 | 0.4 | 1.2 | 1.2 | 26.6 | 0.87 | 3.76 | 0.01 |
| 77 | 2 | 11 | 2 | 8.7 | 278.0 | 10.0 | 287.8 | 9.9 | 296.9 | 0.4 | 1.2 | 1.0 | 26.4 | 0.57 | 3.76 | 0.01 |
| 77 | 2 | 11 | 3 | 7.3 | 224.7 | 10.6 | 242.4 | 13.5 | 257.8 | -1.4 | -0.5 | -0.1 | 27.0 | 1.29 | 3.76 | 0.01 |
| 77 | 2 | 11 | 4 | 1.1 | 255.8 | 2.8 | 280.2 | 3.9 | 288.5 | -2.0 | -2.3 | -1.8 | 28.2 | 0.20 | 3.76 | 0.01 |
| 77 | 2 | 11 | 5 | 5.6 | 285.0 | 6.6 | 293.1 | 7.0 | 299.1 | -2.0 | -1.2 | -1.4 | 28.4 | 0.54 | 3.76 | 0.01 |
| 77 | 2 | 11 | 6 | 1.3 | 43.2 | 3.9 | 58.9 | 5.1 | 52.6 | -3.0 | -3.2 | -2.3 | 28.6 | 0.67 | 3.76 | 0.01 |
| 77 | 2 | 11 | 7 | 0.9 | 219.7 | 1.9 | 247.8 | 3.0 | 158.7 | -3.6 | -5.0 | -3.3 | 29.9 | 0.26 | 3.76 | 0.01 |
| 77 | 2 | 11 | 8 | 3.8 | 240.6 | 5.3 | 220.4 | 4.9 | 198.5 | -3.0 | -2.3 | -2.6 | 28.4 | 0.44 | 3.76 | 0.06 |
| 77 | 2 | 11 | 9 | 2.3 | 178.0 | 4.6 | 177.6 | 4.5 | 186.2 | -0.8 | -0.3 | -1.1 | 26.5 | -0.36 | 3.76 | 0.25 |
| 77 | 2 | 11 | 10 | 3.8 | 68.0 | 5.4 | 61.8 | 5.0 | 64.1 | 0.9 | 1.8 | 0.7 | 24.4 | -0.28 | 3.76 | 0.52 |
| 77 | 2 | 11 | 11 | 15.9 | 331.1 | 18.2 | 324.0 | 19.5 | 331.0 | 1.8 | 1.7 | 1.2 | 24.5 | -0.58 | 3.76 | 0.73 |
| 77 | 2 | 11 | 12 | 15.6 | 344.8 | 17.7 | 340.1 | 18.3 | 345.6 | 1.7 | 1.6 | 1.1 | 24.6 | -0.62 | 3.76 | 0.67 |
| 77 | 2 | 11 | 13 | 12.7 | 355.0 | 14.4 | 350.6 | 15.0 | 351.6 | 1.7 | 1.7 | 1.0 | 24.5 | -0.71 | 3.76 | 0.70 |
| 77 | 2 | 11 | 14 | 14.3 | 341.1 | 16.2 | 336.1 | 17.8 | 342.9 | 1.3 | 1.5 | 0.8 | 24.8 | -0.50 | 3.76 | 0.41 |
| 77 | 2 | 11 | 15 | 12.1 | 347.9 | 13.9 | 346.2 | 15.1 | 351.1 | 0.3 | 0.4 | -0.1 | 26.2 | -0.34 | 3.76 | 0.36 |
| 77 | 2 | 11 | 16 | 13.2 | 40.8 | 15.1 | 32.9 | 15.9 | 33.4 | 1.0 | 1.2 | 0.6 | 25.0 | -0.38 | 3.76 | 0.28 |
| 77 | 2 | 11 | 17 | 6.1 | 153.6 | 6.5 | 140.6 | 5.4 | 142.9 | -0.1 | 0.1 | -0.4 | 28.0 | -0.27 | 3.76 | 0.13 |
| 77 | 2 | 11 | 18 | 1.5 | 338.3 | 3.3 | 47.0 | 4.6 | 61.2 | -1.2 | -1.2 | -1.2 | 31.3 | 0.02 | 3.76 | 0.03 |
| 77 | 2 | 11 | 19 | 6.4 | 290.6 | 5.7 | 301.3 | 5.1 | 323.1 | -1.5 | -1.4 | -1.5 | 41.3 | -0.01 | 3.76 | 0.01 |
| 77 | 2 | 11 | 20 | 7.5 | 301.1 | 8.2 | 322.4 | 8.1 | 353.7 | -2.0 | -0.7 | -0.6 | 36.7 | 1.47 | 3.76 | 0.00 |
| 77 | 2 | 11 | 21 | 7.8 | 302.6 | 7.9 | 320.9 | 7.1 | 345.2 | -1.6 | -0.6 | -0.7 | 32.2 | 0.95 | 3.76 | 0.00 |
| 77 | 2 | 11 | 22 | 6.3 | 303.7 | 6.8 | 330.7 | 6.7 | 7.5 | -2.3 | -1.2 | -0.9 | 32.8 | 1.34 | 3.76 | 0.00 |
| 77 | 2 | 11 | 23 | 8.1 | 310.6 | 9.8 | 336.1 | 10.3 | 3.6 | -3.0 | -1.2 | -1.0 | 33.3 | 2.01 | 3.76 | 0.00 |
| 77 | 2 | 11 | 24 | 6.9 | 321.1 | 8.6 | 349.4 | 11.0 | 16.3 | -2.9 | -1.8 | -1.6 | 32.6 | 1.32 | 3.76 | 0.00 |
| 77 | 2 | 12 | 1 | 4.9 | 299.6 | 5.9 | 340.7 | 6.5 | 7.6 | -3.4 | -2.5 | -2.1 | 32.8 | 1.35 | 3.76 | 0.00 |
| 77 | 2 | 12 | 2 | 2.4 | 218.4 | 2.2 | 333.9 | 2.5 | 33.9 | -3.2 | -3.0 | -2.2 | 31.5 | 1.07 | 3.76 | 0.00 |
| 77 | 2 | 12 | 3 | 2.1 | 164.2 | 2.2 | 51.0 | 2.9 | 46.5 | -2.8 | -4.1 | -2.5 | 32.3 | 0.21 | 3.76 | 0.00 |
| 77 | 2 | 12 | 4 | 4.9 | 210.4 | 5.5 | 193.1 | 4.7 | 192.3 | -3.2 | -2.6 | -2.8 | 31.6 | 0.44 | 3.76 | 0.00 |
| 77 | 2 | 12 | 5 | 5.1 | 212.5 | 4.5 | 184.6 | 3.7 | 176.9 | -2.7 | -2.5 | -2.5 | 30.9 | 0.25 | 3.76 | 0.00 |
| 77 | 2 | 12 | 6 | 4.2 | 279.0 | 4.5 | 276.7 | 3.9 | 262.9 | -2.4 | -2.3 | -2.0 | 30.2 | 0.40 | 3.76 | 0.00 |
| 77 | 2 | 12 | 7 | 2.5 | 207.0 | 4.7 | 217.8 | 5.0 | 204.7 | -3.5 | -2.3 | -1.8 | 31.7 | 1.70 | 3.76 | 0.00 |
| 77 | 2 | 12 | 8 | 4.5 | 228.8 | 4.3 | 221.0 | 3.7 | 236.8 | -1.2 | -0.5 | -1.0 | 28.6 | 0.20 | 3.76 | 0.08 |
| 77 | 2 | 12 | 9 | 3.6 | 222.1 | 3.9 | 217.7 | 4.1 | 234.0 | -0.1 | 0.7 | -0.4 | 26.8 | -0.29 | 3.76 | 0.28 |
| 77 | 2 | 12 | 10 | 5.6 | 234.7 | 6.3 | 225.6 | 6.7 | 226.5 | 0.6 | 0.8 | 0.1 | 26.1 | -0.51 | 3.76 | 0.34 |
| 77 | 2 | 12 | 11 | 4.5 | 155.7 | 5.1 | 158.0 | 5.1 | 178.3 | 1.2 | 1.8 | 0.7 | 25.0 | -0.49 | 3.76 | 0.41 |
| 77 | 2 | 12 | 12 | 7.2 | 252.2 | 8.6 | 242.9 | 10.0 | 243.2 | 2.8 | 2.9 | 2.2 | 25.3 | -0.63 | 3.76 | 0.59 |
| 77 | 2 | 12 | 13 | 8.7 | 234.8 | 9.5 | 234.5 | 10.0 | 237.2 | 3.9 | 4.0 | 3.3 | 24.1 | -0.58 | 3.76 | 0.78 |
| 77 | 2 | 12 | 14 | 11.8 | 263.4 | 13.4 | 258.6 | 13.6 | 263.7 | 4.1 | 4.1 | 3.5 | 24.6 | -0.59 | 3.76 | 0.50 |
| 77 | 2 | 12 | 15 | 8.5 | 250.3 | 9.6 | 247.4 | 10.6 | 253.7 | 3.9 | 4.1 | 3.4 | 24.7 | -0.49 | 3.76 | 0.43 |
| 77 | 2 | 12 | 16 | 9.1 | 246.1 | 10.7 | 244.9 | 11.5 | 247.5 | 5.4 | 5.7 | 4.8 | 23.6 | -0.57 | 3.76 | 0.45 |
| 77 | 2 | 12 | 17 | 7.0 | 234.6 | 8.8 | 229.6 | 11.7 | 239.4 | 5.2 | 6.2 | 4.9 | 23.8 | -0.33 | 3.76 | 0.25 |
| 77 | 2 | 12 | 18 | 8.5 | 269.6 | 9.8 | 272.8 | 10.4 | 280.1 | 4.0 | 4.8 | 4.4 | 25.6 | 0.35 | 3.76 | 0.04 |
| 77 | 2 | 12 | 19 | 12.1 | 270.7 | 16.0 | 270.6 | 17.6 | 281.4 | 3.5 | 4.6 | 4.4 | 26.4 | 0.94 | 3.76 | 0.01 |
| 77 | 2 | 12 | 20 | 12.9 | 276.7 | 17.0 | 277.7 | 18.4 | 287.8 | 3.5 | 4.6 | 4.2 | 25.9 | 0.75 | 3.76 | 0.00 |
| 77 | 2 | 12 | 21 | 12.7 | 273.6 | 16.1 | 272.0 | 18.7 | 279.1 | 3.8 | 4.5 | 4.1 | 26.9 | 0.37 | 3.76 | 0.00 |
| 77 | 2 | 12 | 22 | 9.6 | 261.1 | 12.6 | 261.9 | 14.3 | 268.9 | 3.6 | 4.3 | 4.0 | 26.2 | 0.35 | 3.76 | 0.01 |
| 77 | 2 | 12 | 23 | 10.1 | 259.9 | 7.1 | 259.0 | 15.1 | 263.0 | 3.3 | 3.9 | 3.5 | 26.3 | 0.22 | 3.76 | 0.01 |
| 77 | 2 | 12 | 24 | 10.7 | 248.0 | 13.6 | 249.2 | 14.8 | 259.2 | 2.8 | 3.4 | 3.1 | 26.4 | 0.26 | 3.76 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 2 | 13 | 1 | 7.6 | 292.8 | 8.8 | 294.7 | 9.0 | 303.0 | 1.8 | 2.7 | 2.3 | 26.6 | 0.56 | 3.76 | 0.01 |
| 77 | 2 | 13 | 2 | 13.1 | 247.8 | 15.7 | 245.5 | 16.0 | 252.3 | 1.5 | 2.6 | 2.1 | 26.7 | 0.69 | 3.76 | 0.00 |
| 77 | 2 | 13 | 3 | 11.0 | 253.4 | 11.3 | 262.1 | 9.4 | 278.9 | 1.4 | 2.6 | 2.5 | 27.7 | 1.06 | 3.76 | 0.00 |
| 77 | 2 | 13 | 4 | 11.7 | 243.9 | 14.0 | 234.4 | 14.8 | 234.7 | 0.9 | 1.9 | 1.9 | 27.7 | 1.04 | 3.76 | 0.00 |
| 77 | 2 | 13 | 5 | 12.8 | 251.1 | 16.1 | 242.3 | 19.0 | 243.9 | 1.0 | 1.7 | 1.4 | 27.1 | 0.33 | 3.76 | 0.00 |
| 77 | 2 | 13 | 6 | 5.3 | 302.9 | 6.0 | 318.4 | 6.1 | 327.0 | 0.7 | 1.3 | 1.1 | 27.2 | 0.45 | 3.76 | 0.00 |
| 77 | 2 | 13 | 7 | 7.9 | 233.9 | 8.0 | 225.8 | 8.1 | 229.2 | 0.3 | 1.1 | 0.8 | 27.9 | 0.51 | 3.76 | 0.00 |
| 77 | 2 | 13 | 8 | 3.5 | 286.4 | 3.9 | 299.6 | 4.3 | 299.3 | 0.3 | 0.5 | 0.5 | 28.3 | 0.23 | 3.76 | 0.03 |
| 77 | 2 | 13 | 9 | 9.9 | 240.4 | 12.1 | 244.4 | 14.9 | 255.6 | 1.7 | 2.0 | 1.6 | 26.3 | -0.09 | 3.76 | 0.15 |
| 77 | 2 | 13 | 10 | 10.3 | 251.3 | 12.8 | 246.2 | 14.9 | 250.1 | 2.4 | 2.6 | 2.0 | 26.1 | -0.40 | 3.76 | 0.21 |
| 77 | 2 | 13 | 11 | 13.6 | 255.7 | 15.6 | 255.6 | 16.1 | 257.1 | 3.1 | 3.0 | 2.6 | 25.6 | -0.46 | 3.76 | 0.45 |
| 77 | 2 | 13 | 12 | 9.8 | 254.1 | 10.9 | 247.6 | 12.1 | 252.9 | 4.1 | 4.1 | 3.5 | 24.7 | -0.59 | 3.76 | 0.54 |
| 77 | 2 | 13 | 13 | 9.3 | 253.2 | 10.5 | 249.2 | 11.8 | 251.3 | 5.0 | 5.0 | 4.3 | 23.3 | -0.68 | 3.76 | 0.84 |
| 77 | 2 | 13 | 14 | 11.5 | 283.8 | 12.6 | 279.4 | 13.1 | 283.8 | 5.3 | 5.3 | 4.7 | 23.6 | -0.69 | 3.76 | 0.81 |
| 77 | 2 | 13 | 15 | 7.1 | 310.8 | 7.9 | 304.7 | 8.3 | 307.5 | 5.8 | 5.9 | 5.1 | 23.3 | -0.67 | 3.76 | 0.59 |
| 77 | 2 | 13 | 16 | 8.9 | 281.8 | 10.8 | 276.5 | 11.6 | 280.5 | 5.8 | 6.0 | 5.4 | 23.8 | -0.47 | 3.76 | 0.40 |
| 77 | 2 | 13 | 17 | 6.1 | 299.7 | 7.3 | 295.4 | 8.4 | 301.6 | 5.6 | 5.9 | 5.2 | 23.8 | -0.36 | 3.76 | 0.25 |
| 77 | 2 | 13 | 18 | 7.8 | 284.9 | 10.1 | 291.9 | 12.0 | 299.4 | 3.8 | 4.7 | 4.4 | 25.5 | 0.63 | 3.76 | 0.05 |
| 77 | 2 | 13 | 19 | 9.2 | 278.7 | 10.0 | 284.1 | 11.3 | 294.2 | 3.4 | 4.2 | 3.9 | 25.8 | 0.49 | 3.76 | 0.01 |
| 77 | 2 | 13 | 20 | 10.1 | 293.8 | 11.9 | 298.9 | 12.3 | 312.0 | 3.0 | 4.0 | 3.6 | 26.8 | 0.54 | 3.76 | 0.00 |
| 77 | 2 | 13 | 21 | 9.0 | 309.5 | 10.0 | 317.5 | 11.1 | 330.0 | 2.1 | 2.8 | 2.5 | 26.6 | 0.36 | 3.76 | 0.00 |
| 77 | 2 | 13 | 22 | 8.9 | 321.6 | 10.9 | 323.0 | 12.7 | 333.4 | 1.1 | 2.1 | 1.8 | 27.1 | 0.72 | 3.76 | 0.00 |
| 77 | 2 | 13 | 23 | 8.9 | 323.5 | 11.0 | 337.0 | 12.3 | 348.1 | -0.3 | 1.3 | 1.1 | 28.8 | 1.42 | 3.76 | 0.00 |
| 77 | 2 | 13 | 24 | 11.2 | 332.4 | 13.6 | 336.0 | 16.5 | 346.7 | -0.2 | 0.5 | 0.4 | 28.6 | 0.61 | 3.76 | 0.00 |
| 77 | 2 | 14 | 1 | 6.1 | 35.5 | 7.9 | 34.0 | 9.1 | 34.5 | -1.6 | -1.1 | -1.4 | 29.9 | 0.15 | 3.76 | 0.00 |
| 77 | 2 | 14 | 2 | 5.1 | 104.9 | 7.5 | 55.3 | 11.9 | 37.7 | -3.1 | -2.4 | -2.5 | 39.7 | 0.63 | 3.76 | 0.00 |
| 77 | 2 | 14 | 3 | 6.0 | 338.4 | 8.2 | 352.2 | 9.0 | 6.8 | -3.7 | -3.1 | -3.6 | 65.6 | 0.09 | 3.76 | 0.00 |
| 77 | 2 | 14 | 4 | 5.5 | 329.9 | 8.3 | 358.1 | 10.3 | 11.7 | -4.4 | -3.4 | -3.6 | 68.9 | 0.78 | 3.76 | 0.00 |
| 77 | 2 | 14 | 5 | 5.2 | 293.7 | 6.3 | 320.6 | 8.4 | 6.9 | -4.9 | -4.1 | -4.0 | 62.5 | 0.85 | 3.76 | 0.00 |
| 77 | 2 | 14 | 6 | 2.6 | 328.7 | 3.6 | 344.6 | 4.2 | 3.2 | -4.2 | -4.0 | -4.1 | 47.3 | 0.04 | 3.76 | 0.00 |
| 77 | 2 | 14 | 7 | 3.8 | 306.7 | 3.3 | 347.4 | 3.9 | 26.1 | -4.3 | -4.0 | -4.1 | 46.1 | 0.18 | 3.76 | 0.00 |
| 77 | 2 | 14 | 8 | 2.2 | 296.1 | 2.6 | 317.1 | 2.0 | 323.2 | -4.3 | -4.2 | -4.4 | 45.4 | -0.09 | 3.76 | 0.04 |
| 77 | 2 | 14 | 9 | 1.8 | 269.5 | 2.7 | 301.0 | 2.8 | 289.0 | -2.8 | -2.1 | -3.1 | 37.7 | -0.33 | 3.76 | 0.28 |
| 77 | 2 | 14 | 10 | 4.7 | 61.1 | 5.1 | 52.5 | 5.4 | 52.7 | -1.4 | -0.5 | -1.7 | 26.7 | -0.38 | 3.76 | 0.48 |
| 77 | 2 | 14 | 11 | 8.5 | 15.1 | 10.0 | 11.5 | 9.9 | 14.4 | 0.1 | 0.3 | -0.6 | 26.7 | -0.71 | 3.76 | 0.67 |
| 77 | 2 | 14 | 12 | 7.7 | 14.5 | 8.8 | 4.2 | 8.9 | 6.2 | 0.5 | 0.8 | -0.1 | 26.5 | -0.66 | 3.76 | 0.65 |
| 77 | 2 | 14 | 13 | 9.0 | 3.3 | 9.6 | 355.3 | 10.6 | 4.6 | 1.3 | 1.4 | 0.4 | 25.1 | -0.85 | 3.76 | 0.86 |
| 77 | 2 | 14 | 14 | 13.2 | 321.3 | 15.2 | 318.1 | 15.6 | 328.8 | 1.4 | 1.3 | 0.7 | 25.4 | -0.77 | 3.76 | 0.70 |
| 77 | 2 | 14 | 15 | 11.6 | 25.4 | 13.1 | 17.5 | 13.9 | 22.7 | 1.4 | 1.5 | 0.9 | 25.6 | -0.55 | 3.76 | 0.44 |
| 77 | 2 | 14 | 16 | 11.5 | 42.5 | 13.1 | 38.4 | 13.1 | 36.8 | 0.2 | 0.5 | -0.3 | 26.0 | -0.55 | 3.76 | 0.40 |
| 77 | 2 | 14 | 17 | 7.5 | 61.2 | 9.1 | 59.3 | 9.1 | 61.0 | -0.4 | 0.1 | -0.8 | 26.5 | -0.43 | 3.76 | 0.23 |
| 77 | 2 | 14 | 18 | 1.8 | 359.4 | 3.3 | 33.6 | 5.5 | 44.1 | -1.9 | -1.9 | -1.9 | 31.3 | -0.03 | 3.76 | 0.05 |
| 77 | 2 | 14 | 19 | 4.1 | 326.2 | 5.4 | 357.8 | 7.8 | 20.6 | -2.5 | -2.2 | -2.1 | 33.0 | 0.39 | 3.76 | 0.01 |
| 77 | 2 | 14 | 20 | 4.0 | 288.0 | 4.2 | 309.9 | 4.7 | 332.7 | -2.9 | -2.7 | -2.8 | 32.4 | 0.01 | 3.76 | 0.00 |
| 77 | 2 | 14 | 21 | 3.7 | 252.6 | 3.3 | 243.4 | 3.2 | 209.1 | -2.6 | -2.8 | -2.7 | 32.9 | -0.04 | 3.76 | 0.00 |
| 77 | 2 | 14 | 22 | 3.4 | 254.4 | 3.0 | 284.2 | 2.8 | 284.4 | -1.9 | -2.3 | -2.0 | 31.4 | -0.05 | 3.76 | 0.00 |
| 77 | 2 | 14 | 23 | 6.2 | 324.0 | 8.6 | 328.5 | 10.3 | 348.5 | -3.8 | -2.3 | -2.0 | 29.8 | 1.78 | 3.76 | 0.00 |
| 77 | 2 | 14 | 24 | 3.9 | 316.9 | 5.0 | 13.0 | 7.6 | 30.8 | -2.8 | -2.0 | -2.0 | 29.0 | 0.79 | 3.76 | 0.00 |
| 77 | 2 | 15 | 1 | 6.0 | 278.7 | 5.6 | 280.3 | 4.7 | 296.5 | -2.1 | -2.0 | -2.3 | 28.5 | -0.17 | 3.76 | 0.00 |
| 77 | 2 | 15 | 2 | 6.9 | 307.6 | 6.8 | 318.9 | 6.1 | 349.2 | -3.1 | -2.5 | -2.7 | 28.8 | 0.36 | 3.76 | 0.00 |
| 77 | 2 | 15 | 3 | 3.0 | 292.9 | 3.0 | 307.8 | 2.8 | 311.0 | -2.5 | -2.7 | -2.6 | 28.7 | -0.12 | 3.76 | 0.00 |
| 77 | 2 | 15 | 4 | 3.2 | 221.7 | 2.9 | 217.7 | 2.1 | 202.9 | -2.4 | -3.0 | -2.5 | 29.4 | -0.14 | 3.76 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 2 | 15 | 5 | 2.6 | 191.6 | 3.3 | 166.0 | 3.8 | 145.7 | -2.9 | -2.9 | -2.7 | 29.7 | 0.15 | 3.76 | 0.00 |
| 77 | 2 | 15 | 6 | 7.1 | 231.7 | 7.5 | 211.8 | 7.4 | 199.3 | -3.2 | -2.4 | -2.7 | 28.5 | 0.46 | 3.76 | 0.00 |
| 77 | 2 | 15 | 7 | 2.8 | 252.9 | 3.2 | 222.9 | 2.9 | 188.5 | -3.0 | -2.6 | -2.5 | 28.9 | 0.54 | 3.76 | 0.00 |
| 77 | 2 | 15 | 8 | 2.7 | 253.4 | 2.6 | 296.2 | 2.6 | 295.0 | -2.9 | -2.6 | -2.5 | 28.8 | 0.39 | 3.76 | 0.07 |
| 77 | 2 | 15 | 9 | 3.9 | 132.2 | 4.2 | 131.4 | 4.0 | 156.4 | -0.7 | 0.5 | -1.0 | 25.8 | -0.34 | 3.76 | 0.31 |
| 77 | 2 | 15 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 15 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 15 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 15 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 15 | 14 | 9.2 | 284.5 | 10.0 | 287.9 | 10.6 | 287.7 | 5.6 | 5.5 | 4.9 | 22.8 | -0.67 | 3.76 | 0.82 |
| 77 | 2 | 15 | 15 | 9.3 | 274.9 | 10.3 | 267.6 | 11.1 | 270.2 | 6.4 | 6.5 | 5.7 | 22.2 | -0.73 | 3.76 | 0.71 |
| 77 | 2 | 15 | 16 | 11.4 | 283.7 | 13.4 | 276.0 | 14.9 | 280.6 | 6.2 | 6.2 | 5.6 | 22.7 | -0.63 | 3.76 | 0.51 |
| 77 | 2 | 15 | 17 | 10.2 | 279.9 | 12.4 | 276.3 | 13.8 | 280.7 | 5.4 | 5.7 | 5.1 | 23.0 | -0.31 | 3.76 | 0.27 |
| 77 | 2 | 15 | 18 | 11.5 | 280.2 | 15.1 | 281.9 | 17.2 | 292.1 | 3.7 | 4.6 | 4.3 | 24.8 | 0.69 | 3.76 | 0.06 |
| 77 | 2 | 15 | 19 | 11.4 | 249.4 | 15.3 | 256.8 | 17.3 | 272.2 | 4.5 | 5.3 | 5.1 | 25.2 | 0.59 | 3.76 | 0.01 |
| 77 | 2 | 15 | 20 | 11.4 | 266.1 | 15.7 | 266.0 | 19.6 | 278.8 | 4.7 | 5.2 | 5.0 | 24.7 | 0.30 | 3.76 | 0.01 |
| 77 | 2 | 15 | 21 | 4.5 | 324.9 | 6.5 | 326.4 | 8.9 | 316.4 | 4.2 | 4.7 | 4.4 | 25.2 | 0.24 | 3.76 | 0.00 |
| 77 | 2 | 15 | 22 | 5.5 | 212.3 | 6.0 | 208.7 | 5.9 | 219.8 | 3.7 | 4.0 | 3.8 | 25.4 | 0.13 | 3.76 | 0.00 |
| 77 | 2 | 15 | 23 | 9.1 | 269.5 | 11.0 | 272.0 | 11.5 | 282.3 | 3.2 | 4.2 | 3.9 | 25.9 | 0.65 | 3.76 | 0.00 |
| 77 | 2 | 15 | 24 | 9.0 | 256.4 | 11.9 | 259.0 | 12.3 | 273.5 | 2.5 | 3.8 | 3.6 | 25.7 | 1.11 | 3.76 | 0.00 |
| 77 | 2 | 16 | 1 | 10.1 | 258.6 | 11.4 | 261.5 | 10.9 | 276.6 | 2.4 | 4.0 | 3.7 | 25.5 | 1.22 | 3.76 | 0.00 |
| 77 | 2 | 16 | 2 | 9.7 | 268.7 | 11.0 | 274.5 | 11.8 | 285.6 | 2.3 | 3.2 | 2.9 | 25.4 | 0.58 | 3.76 | 0.00 |
| 77 | 2 | 16 | 3 | 11.4 | 266.7 | 15.1 | 266.4 | 18.0 | 278.5 | 2.6 | 3.5 | 3.3 | 25.8 | 0.74 | 3.76 | 0.00 |
| 77 | 2 | 16 | 4 | 2.4 | 181.8 | 5.2 | 283.7 | 8.2 | 268.3 | 0.8 | 1.5 | 1.9 | 26.3 | 1.06 | 3.76 | 0.00 |
| 77 | 2 | 16 | 5 | 5.6 | 227.8 | 4.7 | 227.3 | 2.7 | 240.0 | 1.7 | 1.9 | 2.0 | 26.1 | 0.23 | 3.76 | 0.00 |
| 77 | 2 | 16 | 6 | 3.1 | 297.3 | 2.4 | 323.3 | 1.0 | 36.7 | 1.8 | 1.5 | 2.3 | 26.1 | 0.56 | 3.76 | 0.00 |
| 77 | 2 | 16 | 7 | 1.9 | 271.3 | 2.3 | 296.2 | 2.4 | 207.9 | 1.3 | 0.3 | 1.3 | 26.7 | 0.00 | 3.76 | 0.00 |
| 77 | 2 | 16 | 8 | 2.0 | 203.2 | 2.6 | 193.0 | 2.4 | 209.4 | 2.0 | 2.7 | 1.9 | 26.0 | -0.09 | 3.76 | 0.12 |
| 77 | 2 | 16 | 9 | 3.8 | 175.9 | 4.5 | 172.4 | 4.3 | 178.3 | 2.9 | 3.4 | 2.5 | 23.9 | -0.42 | 3.76 | 0.27 |
| 77 | 2 | 16 | 10 | 4.8 | 155.8 | 6.0 | 151.6 | 5.9 | 158.4 | 4.3 | 4.8 | 3.7 | 23.1 | -0.54 | 3.76 | 0.49 |
| 77 | 2 | 16 | 11 | 4.3 | 148.8 | 5.2 | 137.2 | 5.4 | 140.2 | 5.8 | 6.3 | 5.3 | 21.9 | -0.53 | 3.76 | 0.68 |
| 77 | 2 | 16 | 12 | 6.8 | 92.4 | 7.6 | 86.3 | 7.3 | 90.5 | 6.3 | 6.6 | 5.8 | 21.1 | -0.45 | 3.76 | 0.78 |
| 77 | 2 | 16 | 13 | 8.4 | 251.2 | 9.4 | 246.2 | 9.0 | 234.4 | 7.8 | 7.9 | 7.2 | 21.4 | -0.60 | 3.76 | 0.91 |
| 77 | 2 | 16 | 14 | 9.8 | 252.1 | 11.1 | 247.7 | 12.6 | 250.1 | 8.1 | 8.0 | 7.2 | 21.6 | -0.83 | 3.76 | 0.85 |
| 77 | 2 | 16 | 15 | 10.3 | 239.7 | 12.1 | 236.4 | 14.0 | 242.1 | 8.6 | 8.5 | 7.8 | 21.4 | -0.81 | 3.76 | 0.74 |
| 77 | 2 | 16 | 16 | 11.3 | 271.9 | 13.4 | 265.4 | 14.0 | 270.2 | 8.4 | 8.5 | 7.8 | 21.8 | -0.56 | 3.76 | 0.51 |
| 77 | 2 | 16 | 17 | 5.3 | 256.5 | 5.9 | 254.1 | 7.2 | 259.5 | 7.9 | 6.4 | 7.5 | 22.3 | -0.41 | 3.76 | 0.25 |
| 77 | 2 | 16 | 18 | 6.3 | 214.9 | 8.6 | 216.0 | 12.6 | 220.1 | 5.9 | 6.3 | 6.0 | 23.8 | 0.05 | 3.76 | 0.06 |
| 77 | 2 | 16 | 19 | 7.5 | 256.4 | 8.6 | 243.5 | 10.9 | 233.3 | 4.6 | 5.0 | 4.8 | 24.6 | 0.16 | 3.76 | 0.01 |
| 77 | 2 | 16 | 20 | 7.9 | 256.4 | 10.3 | 252.4 | 12.1 | 254.4 | 4.7 | 5.3 | 4.9 | 24.6 | 0.15 | 3.76 | 0.01 |
| 77 | 2 | 16 | 21 | 11.6 | 241.5 | 14.8 | 244.0 | 17.4 | 252.3 | 4.8 | 5.8 | 5.6 | 24.9 | 0.80 | 3.76 | 0.00 |
| 77 | 2 | 16 | 22 | 18.6 | 258.9 | 22.3 | 257.3 | 26.0 | 263.4 | 5.7 | 6.4 | 5.5 | 24.1 | -0.17 | 3.76 | 0.00 |
| 77 | 2 | 16 | 23 | 12.9 | 252.3 | 16.9 | 253.9 | 20.0 | 260.5 | 5.0 | 5.6 | 5.1 | 24.3 | 0.12 | 3.76 | 0.00 |
| 77 | 2 | 16 | 24 | 15.6 | 258.2 | 18.5 | 256.6 | 21.5 | 264.5 | 5.1 | 5.7 | 5.1 | 24.1 | 0.02 | 3.76 | 0.00 |
| 77 | 2 | 17 | 1 | 10.5 | 257.8 | 12.8 | 256.8 | 16.0 | 266.4 | 5.1 | 5.6 | 5.3 | 24.3 | 0.19 | 3.76 | 0.00 |
| 77 | 2 | 17 | 2 | 2.8 | 12.9 | 3.5 | 42.4 | 2.6 | 43.5 | 4.0 | 3.9 | 4.4 | 25.7 | 0.45 | 3.76 | 0.00 |
| 77 | 2 | 17 | 3 | 3.4 | 311.4 | 3.4 | 341.6 | 3.3 | 359.9 | 4.1 | 4.4 | 4.7 | 25.3 | 0.57 | 3.76 | 0.00 |
| 77 | 2 | 17 | 4 | 7.1 | 216.2 | 7.4 | 214.0 | 8.4 | 227.9 | 4.3 | 4.7 | 4.3 | 24.3 | -0.06 | 3.76 | 0.00 |
| 77 | 2 | 17 | 5 | 7.9 | 232.1 | 7.9 | 236.6 | 8.9 | 257.1 | 4.1 | 5.0 | 5.0 | 24.6 | 0.92 | 3.76 | 0.00 |
| 77 | 2 | 17 | 6 | 2.0 | 262.8 | 1.7 | 309.3 | 2.0 | 244.7 | 4.1 | 3.1 | 4.9 | 25.4 | 0.76 | 3.76 | 0.00 |
| 77 | 2 | 17 | 7 | 2.0 | 224.2 | 2.2 | 308.6 | 2.0 | 283.7 | 4.6 | 4.1 | 4.7 | 25.4 | 0.12 | 3.76 | 0.00 |
| 77 | 2 | 17 | 8 | 2.8 | 234.1 | 1.8 | 297.3 | 1.1 | 228.3 | 4.5 | 4.0 | 4.8 | 24.7 | 0.28 | 3.76 | 0.07 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 2 | 17 | 9 | 3.2 | 173.3 | 3.4 | 162.7 | 3.2 | 179.1 | 5.3 | 6.0 | 5.0 | 23.2 | -0.27 | 3.76 | 0.26 |
| 77 | 2 | 17 | 10 | 10.4 | 262.0 | 11.5 | 260.2 | 12.2 | 266.3 | 6.7 | 6.8 | 6.1 | 22.6 | -0.62 | 3.76 | 0.50 |
| 77 | 2 | 17 | 11 | 14.2 | 258.8 | 15.8 | 254.4 | 17.2 | 259.5 | 7.2 | 7.0 | 6.5 | 22.5 | -0.68 | 3.76 | 0.70 |
| 77 | 2 | 17 | 12 | 11.4 | 265.2 | 12.7 | 259.9 | 14.0 | 261.7 | 7.4 | 7.4 | 6.8 | 22.1 | -0.64 | 3.76 | 0.79 |
| 77 | 2 | 17 | 13 | 12.4 | 278.0 | 14.6 | 273.3 | 15.4 | 280.9 | 8.0 | 7.7 | 7.0 | 21.9 | -0.96 | 3.76 | 0.86 |
| 77 | 2 | 17 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 17 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 18 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 2 | 19 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |

RIO BLANCO OIL SHALE PROJECT

| DATE | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR MN DY HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 2 19 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 19 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 2 20 17 | 8.6 | 274.1 | 9.4 | 265.1 | 10.1 | 274.0 | 9.8 | 10.5 | 9.7 | 20.9 | -0.07 | 3.76 | 0.20 |
| 77 2 20 18 | 7.8 | 244.8 | 0.9 | 178.9 | 8.9 | 259.9 | 25.0 | 9.5 | 30.8 | 22.4 | 5.77 | 3.76 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 3 | 25 | 17 | 11.2 | 210.2 | 14.4 | 210.3 | 18.0 | 222.2 | 2.7 | 2.8 | 2.2 | 24.5 | -0.55 | 0.24 | 0.17 |
| 77 | 3 | 25 | 18 | 6.8 | 243.4 | 8.0 | 232.4 | 11.3 | 235.1 | 2.0 | 2.2 | 1.6 | 25.1 | -0.39 | 0.24 | 0.05 |
| 77 | 3 | 25 | 19 | 5.5 | 299.0 | 4.3 | 300.8 | 7.1 | 311.0 | 0.7 | 1.0 | 0.4 | 27.9 | -0.32 | 0.24 | 0.01 |
| 77 | 3 | 25 | 20 | 6.8 | 302.6 | 6.6 | 300.3 | 9.4 | 308.0 | -0.3 | -0.1 | -0.7 | 37.3 | -0.34 | 0.24 | 0.01 |
| 77 | 3 | 25 | 21 | 9.2 | 379.5 | 10.5 | 377.6 | 11.7 | 382.1 | -2.0 | -1.8 | -2.4 | 57.1 | -0.35 | 0.26 | 0.01 |
| 77 | 3 | 25 | 22 | 6.4 | 45.2 | 7.5 | 37.3 | 7.9 | 39.7 | -3.3 | -3.0 | -3.5 | 75.0 | -0.28 | 0.32 | 0.01 |
| 77 | 3 | 25 | 23 | 8.4 | 45.0 | 10.1 | 39.1 | 10.9 | 39.5 | -3.7 | -3.4 | -4.0 | 75.8 | -0.41 | 0.39 | 0.01 |
| 77 | 3 | 25 | 24 | 10.7 | 58.7 | 12.9 | 54.4 | 14.1 | 54.5 | -4.3 | -3.9 | -4.5 | 75.5 | -0.24 | 0.40 | 0.01 |
| 77 | 3 | 26 | 1 | 7.2 | 384.7 | 8.6 | 383.0 | 9.3 | 29.4 | -4.6 | -4.3 | -4.9 | 73.7 | -0.27 | 0.40 | 0.01 |
| 77 | 3 | 26 | 2 | 4.4 | 369.9 | 5.4 | 13.0 | 6.1 | 23.5 | -4.6 | -4.4 | -4.9 | 72.8 | -0.30 | 0.40 | 0.01 |
| 77 | 3 | 26 | 3 | 2.1 | 367.8 | 3.0 | 372.7 | 3.4 | 29.9 | -4.7 | -4.5 | -5.0 | 72.5 | -0.31 | 0.40 | 0.01 |
| 77 | 3 | 26 | 4 | 3.9 | 287.5 | 4.3 | 299.5 | 3.8 | 307.4 | -4.7 | -4.5 | -5.0 | 71.6 | -0.32 | 0.40 | 0.01 |
| 77 | 3 | 26 | 5 | 4.8 | 242.5 | 3.8 | 229.9 | 2.9 | 205.3 | -4.1 | -4.0 | -4.7 | 63.2 | -0.57 | 0.40 | 0.01 |
| 77 | 3 | 26 | 6 | 4.0 | 240.7 | 3.8 | 226.7 | 3.4 | 205.9 | -3.8 | -3.7 | -4.1 | 56.9 | -0.23 | 0.40 | 0.01 |
| 77 | 3 | 26 | 7 | 3.1 | 276.3 | 2.8 | 293.4 | 2.2 | 255.0 | -3.6 | -3.2 | -3.7 | 54.6 | -0.14 | 0.40 | 0.05 |
| 77 | 3 | 26 | 8 | 2.4 | 191.1 | 2.7 | 186.9 | 2.4 | 205.8 | -2.6 | -1.9 | -2.9 | 41.5 | -0.36 | 0.40 | 0.09 |
| 77 | 3 | 26 | 9 | 4.6 | 303.8 | 5.1 | 298.8 | 5.5 | 294.9 | -1.3 | -1.0 | -1.8 | 38.5 | -0.47 | 0.40 | 0.13 |
| 77 | 3 | 26 | 10 | 6.8 | 298.1 | 7.7 | 295.0 | 7.7 | 298.9 | -1.4 | -1.4 | -2.0 | 40.9 | -0.57 | 0.40 | 0.18 |
| 77 | 3 | 26 | 11 | 7.0 | 312.5 | 7.7 | 307.0 | 7.6 | 309.4 | -0.5 | -0.5 | -1.1 | 36.4 | -0.59 | 0.40 | 0.42 |
| 77 | 3 | 26 | 12 | 6.9 | 260.1 | 7.7 | 259.2 | 7.8 | 260.0 | 0.2 | 0.5 | -0.3 | 33.3 | -0.49 | 0.40 | 0.82 |
| 77 | 3 | 26 | 13 | 9.0 | 260.2 | 9.8 | 255.4 | 9.7 | 254.8 | 0.9 | 1.0 | 0.2 | 31.8 | -0.66 | 0.40 | 1.14 |
| 77 | 3 | 26 | 14 | 11.1 | 263.0 | 11.9 | 256.6 | 12.5 | 259.1 | 1.9 | 1.8 | 1.1 | 29.3 | -0.76 | 0.40 | 1.09 |
| 77 | 3 | 26 | 15 | 12.0 | 263.5 | 13.4 | 260.2 | 13.9 | 265.6 | 2.9 | 2.7 | 2.1 | 27.7 | -0.75 | 0.40 | 0.91 |
| 77 | 3 | 26 | 16 | 11.7 | 257.9 | 13.4 | 253.6 | 14.5 | 258.8 | 3.5 | 3.5 | 2.8 | 26.3 | -0.65 | 0.40 | 0.64 |
| 77 | 3 | 26 | 17 | 8.5 | 261.6 | 9.7 | 257.4 | 10.6 | 260.7 | 3.6 | 4.0 | 3.1 | 25.5 | -0.53 | 0.40 | 0.25 |
| 77 | 3 | 26 | 18 | 6.8 | 269.9 | 7.9 | 271.7 | 9.0 | 277.7 | 3.4 | 4.2 | 3.1 | 24.6 | -0.29 | 0.40 | 0.10 |
| 77 | 3 | 26 | 19 | 6.0 | 265.8 | 6.5 | 269.9 | 7.2 | 279.6 | 2.6 | 2.9 | 2.6 | 26.3 | 0.02 | 0.40 | 0.01 |
| 77 | 3 | 26 | 20 | 4.8 | 296.3 | 4.8 | 315.3 | 5.1 | 324.0 | 2.1 | 2.3 | 2.3 | 26.9 | 0.24 | 0.40 | 0.01 |
| 77 | 3 | 26 | 21 | 3.9 | 248.2 | 2.4 | 261.3 | 2.9 | 261.3 | 1.9 | 1.6 | 2.3 | 26.6 | 0.38 | 0.40 | 0.01 |
| 77 | 3 | 26 | 22 | 4.0 | 239.4 | 3.0 | 249.8 | 3.7 | 267.4 | 2.8 | 2.7 | 2.7 | 25.1 | -0.06 | 0.40 | 0.01 |
| 77 | 3 | 26 | 23 | 4.7 | 248.1 | 2.4 | 249.1 | 3.7 | 252.4 | 1.8 | 2.4 | 2.4 | 25.3 | 0.54 | 0.40 | 0.01 |
| 77 | 3 | 26 | 24 | 8.9 | 277.6 | 9.3 | 285.1 | 10.1 | 294.5 | 0.9 | 1.6 | 1.4 | 26.2 | 0.45 | 0.40 | 0.01 |
| 77 | 3 | 27 | 1 | 9.1 | 289.2 | 10.5 | 290.3 | 11.5 | 301.4 | -0.4 | 0.3 | 0.0 | 26.3 | 0.38 | 0.40 | 0.01 |
| 77 | 3 | 27 | 2 | 5.5 | 336.6 | 6.0 | 350.3 | 6.3 | 358.7 | -1.0 | -0.3 | -0.4 | 26.6 | 0.58 | 0.40 | 0.01 |
| 77 | 3 | 27 | 3 | 2.2 | 224.1 | 1.3 | 70.1 | 3.1 | 370.2 | -1.2 | -1.9 | -1.2 | 27.3 | -0.02 | 0.40 | 0.01 |
| 77 | 3 | 27 | 4 | 4.6 | 214.8 | 3.2 | 200.2 | 2.8 | 184.1 | -1.2 | -1.2 | -1.2 | 27.4 | 0.03 | 0.40 | 0.01 |
| 77 | 3 | 27 | 5 | 3.0 | 202.0 | 2.3 | 169.3 | 2.3 | 138.6 | -1.2 | -1.4 | -1.2 | 27.6 | -0.06 | 0.40 | 0.01 |
| 77 | 3 | 27 | 6 | 3.5 | 221.6 | 1.7 | 205.3 | 2.6 | 184.7 | -1.3 | -1.3 | -1.3 | 27.5 | -0.02 | 0.40 | 0.02 |
| 77 | 3 | 27 | 7 | 3.4 | 198.7 | 3.7 | 193.9 | 3.4 | 184.2 | -0.8 | -0.2 | -1.1 | 26.4 | -0.25 | 0.40 | 0.19 |
| 77 | 3 | 27 | 8 | 4.5 | 137.3 | 4.4 | 127.2 | 5.3 | 133.4 | 0.0 | 0.7 | -0.5 | 25.0 | -0.50 | 0.40 | 0.47 |
| 77 | 3 | 27 | 9 | 5.7 | 63.9 | 6.4 | 76.4 | 7.0 | 81.6 | 0.6 | 1.1 | 0.0 | 24.6 | -0.57 | 0.40 | 0.76 |
| 77 | 3 | 27 | 10 | 6.9 | 108.2 | 7.0 | 107.0 | 8.5 | 112.2 | 1.6 | 1.8 | 0.9 | 24.0 | -0.71 | 0.40 | 0.99 |
| 77 | 3 | 27 | 11 | 6.4 | 173.1 | 5.5 | 163.5 | 7.5 | 166.3 | 3.1 | 3.2 | 2.3 | 23.2 | -0.76 | 0.40 | 1.15 |
| 77 | 3 | 27 | 12 | 7.2 | 208.8 | 6.6 | 201.2 | 8.6 | 207.2 | 5.3 | 5.3 | 4.5 | 22.2 | -0.79 | 0.40 | 1.21 |
| 77 | 3 | 27 | 13 | 8.7 | 260.9 | 8.6 | 252.2 | 10.8 | 252.3 | 6.6 | 6.5 | 5.7 | 22.0 | -0.80 | 0.40 | 1.19 |
| 77 | 3 | 27 | 14 | 9.7 | 247.0 | 9.7 | 239.1 | 11.8 | 242.4 | 7.5 | 7.3 | 6.6 | 21.8 | -0.93 | 0.40 | 1.10 |
| 77 | 3 | 27 | 15 | 10.9 | 252.0 | 10.5 | 245.4 | 12.8 | 247.5 | 8.3 | 8.2 | 7.5 | 21.6 | -0.77 | 0.20 | 0.98 |
| 77 | 3 | 27 | 16 | 10.9 | 279.2 | 10.7 | 292.0 | 12.7 | 277.4 | 7.9 | 7.9 | 7.2 | 22.1 | -0.68 | 0.40 | 0.51 |
| 77 | 3 | 27 | 17 | 7.8 | 261.6 | 7.9 | 258.0 | 10.6 | 262.0 | 7.5 | 7.6 | 6.9 | 22.2 | -0.58 | 0.40 | 0.27 |
| 77 | 3 | 27 | 18 | 8.7 | 209.5 | 10.1 | 211.2 | 15.2 | 220.1 | 6.1 | 6.4 | 5.9 | 22.8 | -0.23 | 0.40 | 0.08 |
| 77 | 3 | 27 | 19 | 5.7 | 224.0 | 6.7 | 220.8 | 13.3 | 221.6 | 4.7 | 5.0 | 4.7 | 23.8 | 0.03 | 0.40 | 0.01 |
| 77 | 3 | 27 | 20 | 7.1 | 226.8 | 8.2 | 216.7 | 14.1 | 219.3 | 4.4 | 4.7 | 4.4 | 24.0 | 0.02 | 0.40 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 3 | 27 | 21 | 10.3 | 208.5 | 12.7 | 207.1 | 18.7 | 213.8 | 4.2 | 4.6 | 4.2 | 24.0 | 0.08 | 0.40 | 0.01 |
| 77 | 3 | 27 | 22 | 12.6 | 276.6 | 14.3 | 269.9 | 18.6 | 273.6 | 3.8 | 4.1 | 3.6 | 24.4 | -0.18 | 0.40 | 0.01 |
| 77 | 3 | 27 | 23 | 11.9 | 271.0 | 14.0 | 268.7 | 16.6 | 276.5 | 0.8 | 1.0 | 0.5 | 40.0 | -0.34 | 0.40 | 0.01 |
| 77 | 3 | 27 | 24 | 21.2 | 272.5 | 25.6 | 269.9 | 29.1 | 277.3 | -1.6 | -1.5 | -2.4 | 65.7 | -0.83 | 0.44 | 0.01 |
| 77 | 3 | 28 | 1 | 31.0 | 282.0 | 37.3 | 277.7 | 42.0 | 284.5 | -5.3 | -5.1 | -5.5 | 62.0 | -0.23 | 0.48 | 0.01 |
| 77 | 3 | 28 | 2 | 19.9 | 283.3 | 24.1 | 279.7 | 27.8 | 286.8 | -5.7 | -5.4 | -6.0 | 41.4 | -0.29 | 0.48 | 0.01 |
| 77 | 3 | 28 | 3 | 10.3 | 284.1 | 12.5 | 281.6 | 15.4 | 287.5 | -7.0 | -6.7 | -7.3 | 32.3 | -0.26 | 0.24 | 0.00 |
| 77 | 3 | 28 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 28 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 29 | 9 | 16.3 | 265.6 | 16.8 | 260.7 | 19.9 | 262.7 | -8.6 | -9.1 | -8.9 | 29.6 | -0.27 | 0.35 | 0.86 |
| 77 | 3 | 29 | 10 | 15.0 | 270.6 | 15.1 | 265.5 | 17.8 | 270.7 | -7.7 | -8.2 | -8.3 | 28.6 | -0.61 | 0.48 | 1.05 |
| 77 | 3 | 29 | 11 | 12.5 | 260.8 | 12.6 | 254.8 | 15.7 | 257.8 | -6.5 | -7.1 | -7.2 | 27.6 | -0.69 | 0.48 | 1.20 |
| 77 | 3 | 29 | 12 | 12.6 | 280.6 | 12.4 | 273.0 | 15.1 | 274.5 | -6.1 | -6.4 | -6.8 | 27.2 | -0.70 | 0.48 | 0.89 |
| 77 | 3 | 29 | 13 | 12.7 | 267.3 | 13.0 | 262.4 | 15.8 | 267.3 | -6.1 | -6.2 | -6.6 | 27.7 | -0.55 | 0.48 | 0.54 |
| 77 | 3 | 29 | 14 | 15.2 | 261.6 | 15.7 | 257.5 | 18.6 | 263.3 | -5.6 | -5.9 | -6.0 | 27.4 | -0.43 | 0.48 | 0.70 |
| 77 | 3 | 29 | 15 | 12.6 | 261.8 | 13.3 | 258.6 | 16.7 | 266.8 | -5.5 | -5.6 | -6.0 | 27.2 | -0.56 | 0.48 | 0.56 |
| 77 | 3 | 29 | 16 | 15.1 | 262.1 | 16.1 | 258.0 | 19.8 | 265.6 | -5.2 | -5.3 | -5.7 | 27.3 | -0.49 | 0.48 | 0.41 |
| 77 | 3 | 29 | 17 | 12.7 | 251.6 | 13.4 | 243.6 | 18.8 | 250.0 | -5.4 | -5.3 | -5.9 | 27.8 | -0.46 | 0.48 | 0.21 |
| 77 | 3 | 29 | 18 | 12.2 | 253.8 | 12.9 | 247.3 | 17.4 | 254.1 | -5.9 | -5.6 | -6.2 | 28.1 | -0.34 | 0.48 | 0.06 |
| 77 | 3 | 29 | 19 | 10.1 | 257.1 | 10.2 | 250.3 | 14.3 | 255.3 | -6.6 | -6.3 | -6.9 | 28.9 | -0.29 | 0.48 | 0.01 |
| 77 | 3 | 29 | 20 | 6.8 | 239.7 | 6.4 | 238.6 | 10.2 | 246.0 | -7.0 | -6.7 | -7.3 | 29.0 | -0.29 | 0.48 | 0.01 |
| 77 | 3 | 29 | 21 | 7.1 | 272.2 | 6.7 | 266.3 | 9.7 | 269.8 | -7.4 | -7.0 | -7.6 | 29.5 | -0.26 | 0.48 | 0.00 |
| 77 | 3 | 29 | 22 | 6.4 | 241.8 | 6.2 | 241.2 | 9.8 | 249.1 | -7.7 | -7.3 | -7.9 | 29.5 | -0.12 | 0.48 | 0.00 |
| 77 | 3 | 29 | 23 | 8.1 | 253.2 | 8.0 | 250.7 | 10.8 | 253.9 | -8.2 | -7.7 | -8.2 | 29.7 | 0.07 | 0.48 | 0.00 |
| 77 | 3 | 29 | 24 | 9.9 | 251.0 | 10.1 | 249.6 | 13.1 | 255.9 | -8.6 | -7.8 | -8.2 | 29.5 | 0.35 | 0.48 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 3 | 30 | 1 | 10.1 | 252.2 | 9.7 | 251.7 | 12.8 | 259.4 | -8.8 | -7.9 | -8.4 | 29.2 | 0.33 | 0.48 | 0.00 |
| 77 | 3 | 30 | 2 | 10.2 | 249.3 | 10.4 | 251.0 | 13.3 | 260.7 | -9.2 | -8.2 | -8.7 | 29.5 | 0.52 | 0.48 | 0.00 |
| 77 | 3 | 30 | 3 | 7.3 | 256.4 | 7.0 | 259.7 | 10.3 | 270.2 | -9.3 | -8.6 | -9.0 | 29.4 | 0.31 | 0.48 | 0.00 |
| 77 | 3 | 30 | 4 | 6.7 | 243.4 | 5.8 | 249.8 | 8.2 | 263.2 | -8.9 | -8.4 | -8.8 | 29.4 | 0.05 | 0.48 | 0.00 |
| 77 | 3 | 30 | 5 | 5.1 | 267.1 | 4.1 | 273.4 | 6.4 | 271.4 | -9.2 | -8.8 | -9.0 | 29.7 | 0.20 | 0.48 | 0.00 |
| 77 | 3 | 30 | 6 | 7.1 | 257.1 | 6.9 | 259.9 | 10.1 | 263.5 | -9.2 | -8.5 | -8.8 | 29.8 | 0.41 | 0.48 | 0.02 |
| 77 | 3 | 30 | 7 | 5.4 | 334.1 | 5.1 | 327.5 | 7.7 | 321.9 | -8.8 | -8.2 | -8.8 | 29.2 | 0.06 | 0.48 | 0.18 |
| 77 | 3 | 30 | 8 | 4.6 | 64.3 | 3.6 | 58.8 | 5.3 | 62.9 | -8.2 | -7.5 | -8.6 | 28.1 | -0.39 | 0.48 | 0.50 |
| 77 | 3 | 30 | 9 | 4.4 | 92.3 | 3.4 | 80.9 | 4.9 | 89.5 | -6.6 | -5.9 | -7.0 | 26.2 | -0.37 | 0.48 | 0.80 |
| 77 | 3 | 30 | 10 | 5.5 | 144.7 | 4.5 | 140.6 | 6.0 | 154.8 | -5.1 | -4.7 | -5.6 | 25.3 | -0.53 | 0.48 | 0.81 |
| 77 | 3 | 30 | 11 | 4.0 | 194.0 | 2.8 | 187.9 | 3.9 | 185.6 | -4.0 | -3.3 | -4.4 | 25.0 | -0.45 | 0.48 | 0.94 |
| 77 | 3 | 30 | 12 | 4.3 | 177.4 | 3.2 | 281.6 | 4.6 | 195.4 | -3.0 | -2.2 | -3.5 | 23.8 | -0.48 | 0.48 | 0.95 |
| 77 | 3 | 30 | 13 | 5.7 | 171.2 | 5.0 | 171.2 | 7.0 | 182.3 | -1.8 | -1.4 | -2.4 | 23.8 | -0.61 | 0.48 | 1.28 |
| 77 | 3 | 30 | 14 | 5.7 | 43.5 | 6.6 | 157.4 | 8.7 | 164.5 | -1.5 | -1.3 | -2.1 | 24.5 | -0.61 | 0.48 | 0.79 |
| 77 | 3 | 30 | 15 | 9.0 | 100.5 | 9.6 | 92.4 | 9.9 | 160.7 | -0.7 | -0.8 | -1.4 | 24.4 | -0.72 | 0.48 | 0.95 |
| 77 | 3 | 30 | 16 | 9.5 | 101.9 | 11.3 | 104.2 | 11.2 | 95.5 | -0.1 | -0.1 | -0.9 | 24.4 | -0.74 | 0.48 | 0.68 |
| 77 | 3 | 30 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 30 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 30 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 30 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 30 | 21 | 2.7 | 147.9 | 3.5 | 103.0 | 3.8 | 131.7 | -1.4 | -1.1 | -1.2 | 27.1 | 0.20 | 0.24 | 0.00 |
| 77 | 3 | 30 | 22 | 3.0 | 193.2 | 3.0 | 129.9 | 3.3 | 139.0 | -1.5 | -1.5 | -1.4 | 26.9 | 0.18 | 0.48 | 0.00 |
| 77 | 3 | 30 | 23 | 2.6 | 319.2 | 2.9 | 369.8 | 3.8 | 66.7 | -2.4 | -2.5 | -2.2 | 27.1 | 0.16 | 0.48 | 0.00 |
| 77 | 3 | 30 | 24 | 3.6 | 285.1 | 3.0 | 297.9 | 2.0 | 365.4 | -2.3 | -2.8 | -2.3 | 27.1 | -0.05 | 0.48 | 0.00 |
| 77 | 3 | 31 | 1 | 2.4 | 263.6 | 2.2 | 270.0 | 1.9 | 264.1 | -2.2 | -3.2 | -2.2 | 27.4 | 0.02 | 0.48 | 0.00 |
| 77 | 3 | 31 | 2 | 3.0 | 199.6 | 3.4 | 197.0 | 4.5 | 211.0 | -2.5 | -2.6 | -2.1 | 27.4 | 0.33 | 0.48 | 0.00 |
| 77 | 3 | 31 | 3 | 3.2 | 179.0 | 5.4 | 211.3 | 10.3 | 234.0 | -2.0 | -1.7 | -1.2 | 27.4 | 0.79 | 0.48 | 0.00 |
| 77 | 3 | 31 | 4 | 4.6 | 225.2 | 7.3 | 225.4 | 14.1 | 244.1 | -1.7 | -1.4 | -1.4 | 26.7 | 0.35 | 0.48 | 0.00 |
| 77 | 3 | 31 | 5 | 5.5 | 215.8 | 7.9 | 221.7 | 13.7 | 246.0 | -1.4 | -1.1 | -1.3 | 26.6 | 0.16 | 0.48 | 0.00 |
| 77 | 3 | 31 | 6 | 5.1 | 228.7 | 6.5 | 227.6 | 12.1 | 251.6 | -1.4 | -1.2 | -1.3 | 26.3 | 0.08 | 0.48 | 0.02 |
| 77 | 3 | 31 | 7 | 7.0 | 203.8 | 8.6 | 214.5 | 13.6 | 247.1 | -1.0 | -0.7 | -1.1 | 26.2 | -0.15 | 0.48 | 0.13 |
| 77 | 3 | 31 | 8 | 8.1 | 202.4 | 10.3 | 207.7 | 12.6 | 244.8 | 0.3 | 0.4 | -0.2 | 25.3 | -0.56 | 0.48 | 0.35 |
| 77 | 3 | 31 | 9 | 9.3 | 210.3 | 11.0 | 213.6 | 13.5 | 247.1 | 1.2 | 1.3 | 0.6 | 24.8 | -0.68 | 0.48 | 0.54 |
| 77 | 3 | 31 | 10 | 10.5 | 217.4 | 12.9 | 218.3 | 15.9 | 249.0 | 2.1 | 2.0 | 1.3 | 24.3 | -0.80 | 0.48 | 0.78 |
| 77 | 3 | 31 | 11 | 13.6 | 229.2 | 15.5 | 227.3 | 18.8 | 262.6 | 2.7 | 2.5 | 2.0 | 24.0 | -0.68 | 0.48 | 0.89 |
| 77 | 3 | 31 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 3 | 31 | 13 | 12.6 | 229.7 | 13.9 | 229.6 | 15.8 | 260.6 | 2.9 | 2.8 | 2.3 | 23.9 | -0.63 | 0.48 | 0.90 |
| 77 | 3 | 31 | 14 | 12.5 | 233.5 | 14.1 | 233.4 | 16.7 | 267.8 | 3.2 | 3.1 | 2.6 | 23.8 | -0.61 | 0.12 | 0.90 |
| 77 | 3 | 31 | 15 | 10.4 | 262.6 | 11.9 | 261.2 | 13.4 | 290.5 | 3.7 | 3.7 | 3.1 | 23.4 | -0.60 | 0.00 | 0.87 |
| 77 | 3 | 31 | 16 | 16.0 | 209.3 | 20.6 | 212.1 | 25.4 | 242.7 | 4.5 | 4.4 | 4.1 | 23.4 | -0.45 | 0.00 | 0.72 |
| 77 | 3 | 31 | 17 | 14.4 | 210.0 | 17.7 | 212.6 | 22.9 | 240.1 | 3.8 | 3.9 | 3.5 | 23.9 | -0.30 | 0.00 | 0.26 |
| 77 | 3 | 31 | 18 | 9.8 | 228.1 | 11.9 | 226.5 | 16.7 | 248.1 | 2.9 | 3.2 | 2.7 | 24.4 | -0.22 | 0.00 | 0.06 |
| 77 | 3 | 31 | 19 | 10.0 | 276.9 | 12.8 | 277.8 | 15.6 | 297.4 | 1.4 | 2.0 | 1.6 | 25.1 | 0.13 | 0.00 | 0.01 |
| 77 | 3 | 31 | 20 | 7.9 | 282.0 | 10.4 | 294.9 | 12.6 | 327.7 | -0.5 | 0.3 | 0.2 | 26.1 | 0.64 | 0.00 | 0.00 |
| 77 | 3 | 31 | 21 | 10.8 | 278.3 | 14.0 | 284.6 | 16.7 | 315.4 | -0.7 | -0.2 | -0.5 | 26.1 | 0.22 | 0.00 | 0.00 |
| 77 | 3 | 31 | 22 | 11.4 | 292.5 | 15.3 | 286.3 | 18.5 | 317.1 | -1.4 | -0.9 | -1.2 | 26.2 | 0.19 | 0.00 | 0.00 |
| 77 | 3 | 31 | 23 | 11.3 | 279.6 | 15.0 | 282.6 | 18.0 | 312.7 | -1.7 | -1.2 | -1.7 | 26.3 | 0.03 | 0.00 | 0.00 |
| 77 | 3 | 31 | 24 | 13.0 | 288.6 | 16.5 | 290.3 | 19.4 | 316.8 | -2.3 | -1.8 | -2.3 | 26.6 | -0.05 | 0.00 | 0.00 |
| 77 | 4 | 1 | 1 | 5.3 | 387.7 | 6.6 | 384.6 | 7.5 | 398.9 | -2.8 | -2.5 | -2.8 | 27.2 | -0.05 | 0.00 | 0.00 |
| 77 | 4 | 1 | 2 | 3.2 | 463.7 | 4.2 | 110.1 | 4.6 | 145.4 | -2.9 | -2.5 | -2.9 | 27.3 | 0.04 | 0.00 | 0.00 |
| 77 | 4 | 1 | 3 | 2.9 | 221.2 | 3.4 | 175.5 | 4.6 | 198.3 | -2.9 | -2.8 | -3.0 | 27.2 | -0.07 | 0.00 | 0.01 |
| 77 | 4 | 1 | 4 | 5.1 | 178.0 | 6.3 | 175.4 | 7.3 | 202.6 | -3.6 | -3.4 | -3.9 | 28.5 | -0.36 | 0.00 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 1 | 5 | 6.3 | 154.9 | 7.4 | 154.0 | 7.9 | 179.6 | -5.1 | -4.9 | -5.5 | 41.9 | -0.44 | 0.00 | 0.01 |
| 77 | 4 | 1 | 6 | 5.8 | 161.2 | 6.8 | 161.9 | 7.3 | 187.9 | -5.7 | -5.5 | -6.2 | 59.7 | -0.46 | 0.00 | 0.01 |
| 77 | 4 | 1 | 7 | 5.7 | 163.8 | 6.6 | 161.6 | 7.1 | 186.3 | -5.6 | -5.4 | -6.1 | 63.4 | -0.51 | 0.00 | 0.10 |
| 77 | 4 | 1 | 8 | 4.9 | 155.4 | 5.4 | 158.0 | 5.6 | 183.1 | -4.7 | -4.4 | -5.2 | 52.0 | -0.53 | 0.00 | 0.34 |
| 77 | 4 | 1 | 9 | 4.5 | 163.7 | 5.1 | 172.1 | 5.5 | 195.0 | -2.9 | -2.2 | -3.5 | 33.7 | -0.58 | 0.00 | 0.62 |
| 77 | 4 | 1 | 10 | 8.5 | 289.4 | 9.1 | 288.8 | 9.5 | 315.6 | -1.6 | -1.5 | -2.3 | 26.2 | -0.71 | 0.00 | 0.87 |
| 77 | 4 | 1 | 11 | 10.3 | 307.3 | 11.2 | 304.9 | 11.8 | 340.3 | -2.2 | -2.2 | -2.9 | 30.5 | -0.68 | 0.00 | 0.53 |
| 77 | 4 | 1 | 12 | 8.8 | 247.6 | 9.9 | 249.6 | 11.8 | 285.9 | -0.5 | -0.4 | -1.3 | 25.5 | -0.82 | 0.00 | 0.74 |
| 77 | 4 | 1 | 13 | 9.6 | 210.6 | 11.2 | 211.1 | 12.7 | 253.5 | -0.6 | -0.7 | -1.4 | 25.8 | -0.86 | 0.00 | 0.78 |
| 77 | 4 | 1 | 14 | 12.7 | 207.6 | 15.6 | 212.1 | 19.6 | 242.6 | -2.3 | -2.5 | -3.2 | 33.6 | -0.90 | 0.00 | 0.55 |
| 77 | 4 | 1 | 15 | 11.0 | 200.7 | 13.6 | 201.9 | 15.2 | 236.2 | -1.0 | -1.2 | -2.0 | 27.0 | -1.01 | 0.00 | 0.80 |
| 77 | 4 | 1 | 16 | 12.4 | 205.6 | 15.9 | 203.2 | 18.8 | 246.5 | -0.8 | -0.9 | -1.7 | 25.8 | -0.92 | 0.00 | 0.76 |
| 77 | 4 | 1 | 17 | 9.9 | 202.5 | 12.6 | 203.6 | 14.1 | 232.8 | -0.3 | -0.3 | -1.0 | 25.5 | -0.69 | 0.00 | 0.28 |
| 77 | 4 | 1 | 18 | 7.3 | 203.3 | 9.2 | 206.7 | 11.6 | 245.3 | -0.7 | -0.4 | -1.1 | 25.9 | -0.45 | 0.00 | 0.14 |
| 77 | 4 | 1 | 19 | 7.9 | 202.9 | 10.3 | 207.6 | 13.2 | 247.8 | -1.5 | -1.3 | -1.8 | 27.3 | -0.22 | 0.00 | 0.01 |
| 77 | 4 | 1 | 20 | 4.7 | 208.9 | 6.9 | 207.4 | 8.9 | 231.7 | -2.5 | -2.1 | -2.5 | 28.6 | -0.03 | 0.00 | 0.01 |
| 77 | 4 | 1 | 21 | 2.8 | 150.6 | 3.9 | 156.7 | 5.0 | 194.8 | -3.2 | -3.1 | -3.2 | 30.9 | 0.01 | 0.00 | 0.01 |
| 77 | 4 | 1 | 22 | 2.6 | 131.2 | 4.0 | 133.6 | 5.6 | 219.1 | -3.5 | -3.2 | -3.3 | 37.3 | 0.13 | 0.00 | 0.01 |
| 77 | 4 | 1 | 23 | 3.2 | 191.5 | 4.3 | 202.6 | 6.5 | 237.0 | -3.4 | -3.4 | -3.5 | 34.9 | -0.07 | 0.00 | 0.01 |
| 77 | 4 | 1 | 24 | 3.0 | 173.1 | 3.6 | 163.9 | 4.9 | 231.5 | -4.1 | -3.9 | -4.4 | 45.6 | -0.35 | 0.00 | 0.01 |
| 77 | 4 | 2 | 1 | 2.1 | 137.1 | 2.2 | 109.1 | 3.0 | 199.8 | -4.7 | -4.4 | -5.5 | 61.5 | -0.81 | 0.07 | 0.01 |
| 77 | 4 | 2 | 2 | 2.2 | 371.6 | 2.2 | 295.6 | 2.6 | 436.9 | -4.9 | -4.6 | -5.9 | 66.7 | -1.61 | 0.41 | 0.01 |
| 77 | 4 | 2 | 3 | 2.7 | 133.2 | 3.4 | 135.0 | 4.6 | 150.5 | -4.9 | -4.6 | -5.1 | 68.6 | -0.22 | 0.74 | 0.01 |
| 77 | 4 | 2 | 4 | 3.6 | 170.9 | 4.9 | 169.1 | 6.4 | 197.1 | -5.1 | -4.8 | -5.2 | 70.4 | -0.15 | 0.84 | 0.01 |
| 77 | 4 | 2 | 5 | 3.0 | 180.0 | 3.9 | 172.7 | 5.1 | 185.7 | -5.0 | -4.9 | -4.9 | 69.3 | 0.04 | 0.84 | 0.01 |
| 77 | 4 | 2 | 6 | 4.1 | 170.3 | 5.6 | 169.6 | 7.2 | 191.5 | -5.1 | -4.8 | -5.0 | 63.3 | 0.15 | 0.84 | 0.01 |
| 77 | 4 | 2 | 7 | 7.8 | 251.4 | 9.3 | 249.6 | 11.6 | 268.6 | -5.2 | -5.1 | -5.5 | 58.0 | -0.34 | 0.84 | 0.01 |
| 77 | 4 | 2 | 8 | 8.0 | 254.0 | 9.2 | 253.2 | 10.9 | 274.5 | -4.9 | -5.0 | -5.3 | 52.2 | -0.44 | 0.84 | 0.03 |
| 77 | 4 | 2 | 9 | 9.8 | 254.5 | 10.9 | 251.8 | 12.7 | 274.2 | -4.6 | -4.8 | -5.1 | 48.6 | -0.52 | 0.84 | 0.05 |
| 77 | 4 | 2 | 10 | 10.4 | 259.1 | 11.1 | 258.8 | 13.0 | 283.5 | -4.4 | -4.7 | -5.0 | 45.7 | -0.54 | 0.84 | 0.06 |
| 77 | 4 | 2 | 11 | 10.9 | 256.3 | 11.5 | 255.0 | 13.4 | 279.0 | -3.9 | -4.4 | -4.4 | 39.8 | -0.52 | 0.84 | 0.09 |
| 77 | 4 | 2 | 12 | 12.1 | 259.0 | 12.6 | 257.9 | 14.2 | 280.8 | -3.5 | -4.0 | -4.0 | 36.3 | -0.48 | 0.84 | 0.11 |
| 77 | 4 | 2 | 13 | 11.1 | 271.1 | 12.2 | 271.7 | 13.2 | 295.1 | -3.7 | -4.1 | -4.3 | 39.3 | -0.57 | 0.84 | 0.09 |
| 77 | 4 | 2 | 14 | 7.3 | 285.7 | 7.6 | 283.0 | 8.3 | 301.6 | -3.6 | -3.8 | -4.1 | 37.4 | -0.52 | 0.84 | 0.08 |
| 77 | 4 | 2 | 15 | 5.2 | 265.3 | 5.7 | 262.7 | 6.5 | 287.2 | -3.3 | -3.2 | -3.9 | 33.9 | -0.55 | 0.84 | 0.05 |
| 77 | 4 | 2 | 16 | 6.7 | 219.5 | 7.6 | 223.4 | 7.9 | 249.5 | -4.3 | -4.3 | -4.8 | 44.0 | -0.51 | 0.84 | 0.03 |
| 77 | 4 | 2 | 17 | 6.6 | 10.6 | 7.4 | 12.2 | 8.3 | 27.5 | -5.7 | -5.4 | -7.0 | 63.9 | -1.34 | 1.20 | 0.02 |
| 77 | 4 | 2 | 18 | 9.0 | 17.1 | 10.2 | 19.3 | 11.3 | 30.9 | -6.1 | -5.9 | -6.4 | 66.6 | -0.38 | 1.40 | 0.02 |
| 77 | 4 | 2 | 19 | 6.4 | 350.2 | 7.5 | 359.6 | 9.1 | 17.2 | -6.7 | -6.4 | -6.8 | 64.2 | -0.12 | 1.47 | 0.01 |
| 77 | 4 | 2 | 20 | 4.5 | 296.1 | 4.3 | 326.3 | 5.4 | 14.0 | -7.4 | -7.1 | -7.1 | 61.2 | 0.32 | 1.48 | 0.01 |
| 77 | 4 | 2 | 21 | 3.7 | 292.9 | 3.3 | 329.2 | 4.4 | 37.1 | -7.4 | -7.3 | -7.2 | 60.5 | 0.18 | 1.48 | 0.01 |
| 77 | 4 | 2 | 22 | 3.4 | 314.3 | 4.0 | 342.3 | 5.1 | 38.9 | -7.2 | -7.0 | -7.1 | 60.6 | 0.08 | 1.48 | 0.00 |
| 77 | 4 | 2 | 23 | 3.8 | 328.9 | 5.0 | 358.3 | 7.0 | 41.9 | -7.8 | -7.5 | -7.5 | 58.5 | 0.32 | 1.48 | 0.01 |
| 77 | 4 | 2 | 24 | 5.0 | 325.9 | 6.7 | 356.6 | 9.6 | 41.1 | -9.0 | -8.3 | -8.2 | 61.1 | 0.74 | 1.48 | 0.00 |
| 77 | 4 | 3 | 1 | 4.4 | 309.8 | 5.4 | 336.9 | 6.9 | 24.4 | -9.2 | -8.7 | -8.9 | 60.2 | 0.28 | 1.48 | 0.00 |
| 77 | 4 | 3 | 2 | 5.7 | 338.6 | 7.7 | 358.8 | 9.2 | 33.4 | -9.4 | -8.7 | -9.1 | 59.4 | 0.32 | 1.48 | 0.00 |
| 77 | 4 | 3 | 3 | 5.7 | 9.4 | 6.8 | 15.0 | 8.0 | 44.0 | -9.0 | -8.7 | -9.3 | 59.1 | -0.21 | 1.48 | 0.00 |
| 77 | 4 | 3 | 4 | 4.0 | 12.3 | 4.8 | 17.9 | 5.9 | 40.0 | -9.2 | -8.9 | -9.5 | 59.8 | -0.31 | 1.48 | 0.00 |
| 77 | 4 | 3 | 5 | 5.2 | 14.8 | 6.2 | 16.0 | 7.3 | 42.3 | -9.6 | -9.2 | -9.8 | 61.7 | -0.23 | 1.48 | 0.01 |
| 77 | 4 | 3 | 6 | 4.7 | 352.2 | 5.4 | 360.7 | 6.4 | 31.2 | -9.5 | -9.3 | -9.8 | 62.8 | -0.25 | 1.48 | 0.01 |
| 77 | 4 | 3 | 7 | 4.7 | 354.4 | 5.3 | 3.0 | 6.0 | 32.8 | -9.1 | -8.9 | -9.5 | 59.4 | -0.36 | 1.48 | 0.01 |
| 77 | 4 | 3 | 8 | 7.8 | 22.8 | 8.7 | 26.4 | 9.3 | 54.2 | -8.2 | -8.0 | -8.6 | 50.8 | -0.41 | 1.48 | 0.03 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 3 | 9 | 9.6 | 27.0 | 10.6 | 29.1 | 11.3 | 53.7 | -7.4 | -7.3 | -7.9 | 42.3 | -0.44 | 1.48 | 0.06 |
| 77 | 4 | 3 | 10 | 13.3 | 18.7 | 14.8 | 20.8 | 15.4 | 42.9 | -6.4 | -6.5 | -7.0 | 33.7 | -0.59 | 1.48 | 0.23 |
| 77 | 4 | 3 | 11 | 14.9 | 10.8 | 16.4 | 13.2 | 16.8 | 32.9 | -6.0 | -6.2 | -6.6 | 30.5 | -0.65 | 1.48 | 1.02 |
| 77 | 4 | 3 | 12 | 16.2 | 15.7 | 17.9 | 17.8 | 18.5 | 37.3 | -5.4 | -5.7 | -6.1 | 29.1 | -0.69 | 1.48 | 1.14 |
| 77 | 4 | 3 | 13 | 14.5 | 22.7 | 15.8 | 24.4 | 16.3 | 45.6 | -4.9 | -5.1 | -5.5 | 28.3 | -0.65 | 1.48 | 1.13 |
| 77 | 4 | 3 | 14 | 12.1 | 25.8 | 13.3 | 28.2 | 13.7 | 55.8 | -4.4 | -4.4 | -5.0 | 27.5 | -0.57 | 1.48 | 0.78 |
| 77 | 4 | 3 | 15 | 9.8 | 27.4 | 11.0 | 28.8 | 11.4 | 57.6 | -4.0 | -3.9 | -4.5 | 27.1 | -0.56 | 1.48 | 0.64 |
| 77 | 4 | 3 | 16 | 8.6 | 51.6 | 9.5 | 48.8 | 10.3 | 83.2 | -3.6 | -3.4 | -4.0 | 26.5 | -0.42 | 1.48 | 0.41 |
| 77 | 4 | 3 | 17 | 7.4 | 41.9 | 8.4 | 43.4 | 9.0 | 79.1 | -3.3 | -3.0 | -3.7 | 26.1 | -0.35 | 1.48 | 0.32 |
| 77 | 4 | 3 | 18 | 4.6 | 346.2 | 5.3 | 358.6 | 6.0 | 45.9 | -3.2 | -2.8 | -3.5 | 26.3 | -0.22 | 1.48 | 0.11 |
| 77 | 4 | 3 | 19 | 6.1 | 310.2 | 6.9 | 325.5 | 8.4 | 20.8 | -4.2 | -3.5 | -3.7 | 27.9 | 0.52 | 1.48 | 0.01 |
| 77 | 4 | 3 | 20 | 8.3 | 310.5 | 9.9 | 316.5 | 11.9 | 366.5 | -3.8 | -3.2 | -3.5 | 28.5 | 0.35 | 1.48 | 0.00 |
| 77 | 4 | 3 | 21 | 11.9 | 323.4 | 14.0 | 323.7 | 16.3 | 6.8 | -3.3 | -2.8 | -3.3 | 29.1 | 0.02 | 1.48 | 0.00 |
| 77 | 4 | 3 | 22 | 11.1 | 307.1 | 13.2 | 311.7 | 15.1 | 358.3 | -3.8 | -3.2 | -3.6 | 29.7 | 0.20 | 1.48 | 0.00 |
| 77 | 4 | 3 | 23 | 5.9 | 241.8 | 7.6 | 286.8 | 9.8 | 343.8 | -4.1 | -3.7 | -3.9 | 30.0 | 0.25 | 1.48 | 0.00 |
| 77 | 4 | 3 | 24 | 3.2 | 220.2 | 3.8 | 273.1 | 5.6 | 333.8 | -4.3 | -4.4 | -4.2 | 30.9 | 0.10 | 1.48 | 0.00 |
| 77 | 4 | 4 | 1 | 6.9 | 250.8 | 9.2 | 262.0 | 11.7 | 312.7 | -3.9 | -3.3 | -3.6 | 29.3 | 0.27 | 1.48 | 0.00 |
| 77 | 4 | 4 | 2 | 7.6 | 239.8 | 9.4 | 248.6 | 11.4 | 299.7 | -4.2 | -3.7 | -3.9 | 29.4 | 0.25 | 1.48 | 0.01 |
| 77 | 4 | 4 | 3 | 9.6 | 235.9 | 10.5 | 247.6 | 10.4 | 303.9 | -4.3 | -3.5 | -3.7 | 30.1 | 0.65 | 1.48 | 0.01 |
| 77 | 4 | 4 | 4 | 6.7 | 199.9 | 6.9 | 219.7 | 7.2 | 311.3 | -4.3 | -3.5 | -3.6 | 29.9 | 0.76 | 1.48 | 0.01 |
| 77 | 4 | 4 | 5 | 10.1 | 252.3 | 12.7 | 260.7 | 15.5 | 311.8 | -3.7 | -3.0 | -3.2 | 29.4 | 0.44 | 1.48 | 0.00 |
| 77 | 4 | 4 | 6 | 11.4 | 263.4 | 14.3 | 267.1 | 16.5 | 316.2 | -3.3 | -2.5 | -2.7 | 28.8 | 0.58 | 1.48 | 0.04 |
| 77 | 4 | 4 | 7 | 8.4 | 270.3 | 10.6 | 270.0 | 12.4 | 316.8 | -2.5 | -2.1 | -2.6 | 28.0 | -0.07 | 1.48 | 0.25 |
| 77 | 4 | 4 | 8 | 4.7 | 395.5 | 4.7 | 400.1 | 4.8 | 428.8 | -1.8 | -1.1 | -1.7 | 25.5 | 0.09 | 1.48 | 0.50 |
| 77 | 4 | 4 | 9 | 3.6 | 80.8 | 3.9 | 77.0 | 3.6 | 121.9 | -0.6 | 0.3 | -0.6 | 23.7 | -0.05 | 1.48 | 0.80 |
| 77 | 4 | 4 | 10 | 6.2 | 331.6 | 7.3 | 331.8 | 7.1 | 342.5 | 1.8 | 2.4 | 1.2 | 23.0 | -0.59 | 1.48 | 1.02 |
| 77 | 4 | 4 | 11 | 10.1 | 358.5 | 11.3 | 338.4 | 11.9 | 365.7 | 3.3 | 2.8 | 2.4 | 23.8 | -0.84 | 1.48 | 1.19 |
| 77 | 4 | 4 | 12 | 10.2 | 360.6 | 11.2 | 335.8 | 11.7 | 367.3 | 3.8 | 3.4 | 3.0 | 23.6 | -0.84 | 1.48 | 1.28 |
| 77 | 4 | 4 | 13 | 8.3 | 352.2 | 9.1 | 326.3 | 9.3 | 361.9 | 4.9 | 4.6 | 4.2 | 22.9 | -0.80 | 1.48 | 1.29 |
| 77 | 4 | 4 | 14 | 10.0 | 332.5 | 11.3 | 304.3 | 12.0 | 340.4 | 5.6 | 5.2 | 4.9 | 22.5 | -0.68 | 1.43 | 1.18 |
| 77 | 4 | 4 | 15 | 11.0 | 354.7 | 12.3 | 326.7 | 12.9 | 359.4 | 5.5 | 5.4 | 4.9 | 23.1 | -0.59 | 1.48 | 0.69 |
| 77 | 4 | 4 | 16 | 9.7 | 323.3 | 10.9 | 300.9 | 11.5 | 331.0 | 5.1 | 5.2 | 4.6 | 23.3 | -0.47 | 1.48 | 0.41 |
| 77 | 4 | 4 | 17 | 6.8 | 300.0 | 7.9 | 278.0 | 8.7 | 307.0 | 5.3 | 5.5 | 4.9 | 23.3 | -0.39 | 1.48 | 0.20 |
| 77 | 4 | 4 | 18 | 8.0 | 304.4 | 9.9 | 283.3 | 11.4 | 313.2 | 5.1 | 5.5 | 4.9 | 23.7 | -0.16 | 1.48 | 0.08 |
| 77 | 4 | 4 | 19 | 5.3 | 380.9 | 6.2 | 378.6 | 7.5 | 421.3 | 2.8 | 3.2 | 2.8 | 29.8 | -0.05 | 1.48 | 0.01 |
| 77 | 4 | 4 | 20 | 5.6 | 355.4 | 6.3 | 343.2 | 6.5 | 22.2 | 1.3 | 1.6 | 1.2 | 44.5 | -0.10 | 1.48 | 0.01 |
| 77 | 4 | 4 | 21 | 5.8 | 331.9 | 5.8 | 324.3 | 6.1 | 370.3 | 0.9 | 1.1 | 0.7 | 51.6 | -0.17 | 1.48 | 0.01 |
| 77 | 4 | 4 | 22 | 3.8 | 293.5 | 3.5 | 286.0 | 3.5 | 329.1 | 1.6 | 1.8 | 1.4 | 44.5 | -0.23 | 1.48 | 0.01 |
| 77 | 4 | 4 | 23 | 4.6 | 353.4 | 5.6 | 346.9 | 7.3 | 27.7 | 2.0 | 2.3 | 2.0 | 37.3 | 0.05 | 1.48 | 0.01 |
| 77 | 4 | 4 | 24 | 7.7 | 15.6 | 9.0 | 358.9 | 10.2 | 28.0 | 2.1 | 2.4 | 1.9 | 30.8 | -0.13 | 1.48 | 0.01 |
| 77 | 4 | 5 | 1 | 5.7 | 334.1 | 6.9 | 325.8 | 8.1 | 363.6 | 1.4 | 2.0 | 1.6 | 31.4 | 0.13 | 1.48 | 0.01 |
| 77 | 4 | 5 | 2 | 3.3 | 217.5 | 3.7 | 226.1 | 4.1 | 322.1 | 1.0 | 1.4 | 1.3 | 33.7 | 0.27 | 1.48 | 0.01 |
| 77 | 4 | 5 | 3 | 2.3 | 207.3 | 2.6 | 167.8 | 2.8 | 182.3 | 1.3 | 1.4 | 1.3 | 32.9 | -0.08 | 1.48 | 0.01 |
| 77 | 4 | 5 | 4 | 2.8 | 278.4 | 2.6 | 275.2 | 2.7 | 311.4 | 1.4 | 1.4 | 1.5 | 30.1 | 0.08 | 1.48 | 0.01 |
| 77 | 4 | 5 | 5 | 4.7 | 317.9 | 4.5 | 321.9 | 4.9 | 362.5 | 1.1 | 1.5 | 1.3 | 29.8 | 0.21 | 1.48 | 0.01 |
| 77 | 4 | 5 | 6 | 5.5 | 323.9 | 6.3 | 323.9 | 7.7 | 361.9 | 0.3 | 1.1 | 1.2 | 30.2 | 0.91 | 1.48 | 0.04 |
| 77 | 4 | 5 | 7 | 6.0 | 357.0 | 7.5 | 340.1 | 8.7 | 15.0 | 1.5 | 2.1 | 1.7 | 28.8 | 0.16 | 1.48 | 0.24 |
| 77 | 4 | 5 | 8 | 7.8 | 43.6 | 8.8 | 382.2 | 9.4 | 51.0 | 2.8 | 3.0 | 2.2 | 25.8 | -0.58 | 1.48 | 0.56 |
| 77 | 4 | 5 | 9 | 11.3 | 68.3 | 12.8 | 48.3 | 13.0 | 76.0 | 3.1 | 3.2 | 2.4 | 24.7 | -0.62 | 1.48 | 0.70 |
| 77 | 4 | 5 | 10 | 9.7 | 69.4 | 10.9 | 46.9 | 11.4 | 73.6 | 3.1 | 3.3 | 2.5 | 24.6 | -0.59 | 1.48 | 0.82 |
| 77 | 4 | 5 | 11 | 6.5 | 82.7 | 7.3 | 63.7 | 7.9 | 91.9 | 3.1 | 3.4 | 2.7 | 24.5 | -0.47 | 1.48 | 0.62 |
| 77 | 4 | 5 | 12 | 5.7 | 127.1 | 6.1 | 104.1 | 6.7 | 131.3 | 4.4 | 4.8 | 3.9 | 21.6 | -0.46 | 1.48 | 1.27 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 5 | 13 | 6.0 | 74.8 | 6.5 | 61.7 | 6.8 | 88.0 | 5.3 | 5.8 | 4.8 | 21.9 | -0.49 | 1.48 | 0.97 |
| 77 | 4 | 5 | 14 | 6.1 | 71.4 | 6.7 | 49.4 | 7.1 | 73.9 | 6.0 | 6.3 | 5.4 | 21.9 | -0.54 | 1.48 | 0.76 |
| 77 | 4 | 5 | 15 | 4.8 | 86.9 | 5.4 | 69.6 | 5.8 | 89.7 | 6.5 | 6.7 | 5.7 | 21.9 | -0.54 | 1.48 | 0.60 |
| 77 | 4 | 5 | 16 | 4.7 | 59.3 | 4.9 | 397.1 | 5.1 | 62.9 | 6.9 | 7.6 | 6.4 | 20.9 | -0.50 | 1.48 | 0.70 |
| 77 | 4 | 5 | 17 | 5.6 | 77.4 | 6.1 | 51.9 | 6.1 | 74.4 | 7.1 | 7.7 | 6.6 | 20.9 | -0.54 | 1.48 | 0.46 |
| 77 | 4 | 5 | 18 | 3.3 | 145.0 | 3.8 | 124.6 | 3.9 | 151.3 | 6.7 | 7.3 | 6.3 | 20.9 | -0.39 | 1.48 | 0.13 |
| 77 | 4 | 5 | 19 | 3.7 | 221.5 | 4.0 | 188.2 | 4.0 | 200.8 | 5.8 | 5.9 | 5.9 | 23.5 | 0.08 | 1.48 | 0.02 |
| 77 | 4 | 5 | 20 | 5.5 | 246.0 | 5.5 | 207.4 | 5.4 | 214.9 | 5.1 | 5.5 | 5.2 | 24.3 | 0.17 | 1.48 | 0.01 |
| 77 | 4 | 5 | 21 | 7.4 | 252.7 | 8.2 | 216.8 | 8.5 | 222.0 | 4.6 | 5.3 | 5.2 | 24.4 | 0.63 | 1.48 | 0.01 |
| 77 | 4 | 5 | 22 | 7.0 | 258.5 | 8.3 | 216.1 | 8.5 | 221.6 | 4.4 | 5.3 | 5.3 | 24.4 | 0.88 | 1.48 | 0.01 |
| 77 | 4 | 5 | 23 | 5.5 | 242.1 | 5.7 | 199.2 | 5.9 | 208.5 | 4.8 | 5.4 | 5.2 | 24.3 | 0.31 | 1.48 | 0.01 |
| 77 | 4 | 5 | 24 | 3.1 | 214.2 | 3.7 | 182.8 | 4.7 | 192.4 | 5.2 | 5.2 | 5.3 | 24.3 | 0.09 | 1.48 | 0.01 |
| 77 | 4 | 6 | 1 | 5.3 | 244.2 | 4.9 | 203.3 | 4.8 | 208.8 | 5.1 | 5.3 | 5.2 | 24.2 | 0.16 | 1.48 | 0.01 |
| 77 | 4 | 6 | 2 | 2.9 | 230.9 | 2.5 | 201.4 | 2.3 | 190.3 | 4.3 | 4.1 | 5.2 | 24.4 | 0.86 | 1.48 | 0.01 |
| 77 | 4 | 6 | 3 | 2.1 | 315.3 | 2.5 | 231.3 | 2.2 | 235.5 | 3.8 | 3.3 | 4.7 | 25.2 | 0.93 | 1.48 | 0.01 |
| 77 | 4 | 6 | 4 | 1.5 | 104.1 | 1.6 | 424.1 | 1.4 | 184.9 | 3.9 | 1.9 | 4.5 | 25.7 | 0.60 | 1.48 | 0.01 |
| 77 | 4 | 6 | 5 | 2.2 | 360.0 | 2.2 | 33.2 | 2.0 | 88.8 | 2.8 | 1.7 | 3.5 | 25.7 | 0.73 | 1.48 | 0.01 |
| 77 | 4 | 6 | 6 | 2.3 | 324.9 | 2.2 | 332.2 | 2.4 | 45.5 | 2.8 | 2.5 | 3.0 | 25.2 | 0.25 | 1.48 | 0.05 |
| 77 | 4 | 6 | 7 | 1.7 | 82.6 | 2.0 | 383.4 | 2.3 | 245.3 | 3.7 | 5.4 | 3.7 | 23.7 | 0.02 | 1.48 | 0.27 |
| 77 | 4 | 6 | 8 | 3.6 | 94.3 | 3.7 | 84.2 | 3.4 | 145.3 | 4.9 | 6.0 | 4.6 | 22.9 | -0.24 | 1.48 | 0.57 |
| 77 | 4 | 6 | 9 | 4.4 | 115.5 | 4.8 | 100.2 | 5.1 | 141.2 | 6.7 | 7.5 | 6.3 | 22.1 | -0.48 | 1.48 | 0.85 |
| 77 | 4 | 6 | 10 | 5.1 | 135.3 | 5.6 | 123.1 | 5.9 | 152.8 | 8.2 | 8.7 | 7.5 | 21.2 | -0.66 | 1.48 | 1.08 |
| 77 | 4 | 6 | 11 | 4.4 | 169.4 | 4.8 | 139.8 | 5.0 | 179.8 | 9.2 | 9.7 | 8.6 | 20.4 | -0.64 | 1.48 | 1.22 |
| 77 | 4 | 6 | 12 | 6.0 | 237.8 | 6.7 | 213.7 | 6.8 | 236.8 | 10.4 | 10.5 | 9.6 | 20.3 | -0.79 | 1.48 | 1.29 |
| 77 | 4 | 6 | 13 | 5.1 | 185.8 | 5.7 | 170.4 | 5.8 | 203.2 | 11.1 | 11.5 | 10.5 | 19.4 | -0.63 | 1.48 | 1.26 |
| 77 | 4 | 6 | 14 | 5.6 | 216.4 | 5.8 | 204.2 | 6.1 | 259.4 | 11.9 | 12.2 | 11.2 | 19.3 | -0.73 | 1.48 | 1.14 |
| 77 | 4 | 6 | 15 | 6.2 | 289.7 | 6.8 | 265.7 | 6.9 | 289.8 | 12.3 | 12.5 | 11.6 | 19.6 | -0.71 | 1.48 | 0.95 |
| 77 | 4 | 6 | 16 | 5.1 | 256.1 | 5.6 | 241.9 | 6.0 | 261.2 | 12.7 | 13.1 | 12.0 | 19.2 | -0.72 | 1.48 | 0.70 |
| 77 | 4 | 6 | 17 | 3.5 | 304.3 | 3.6 | 263.3 | 3.7 | 290.2 | 12.7 | 13.7 | 12.1 | 18.9 | -0.61 | 1.48 | 0.41 |
| 77 | 4 | 6 | 18 | 3.2 | 314.8 | 4.0 | 292.4 | 4.7 | 318.4 | 11.8 | 12.3 | 11.4 | 19.8 | -0.41 | 1.48 | 0.13 |
| 77 | 4 | 6 | 19 | 3.8 | 295.3 | 3.8 | 275.7 | 3.8 | 305.6 | 10.5 | 10.2 | 10.3 | 21.9 | -0.14 | 1.48 | 0.02 |
| 77 | 4 | 6 | 20 | 10.9 | 269.8 | 11.4 | 247.8 | 10.8 | 271.7 | 9.7 | 10.4 | 10.4 | 22.0 | 0.66 | 1.48 | 0.01 |
| 77 | 4 | 6 | 21 | 12.2 | 269.2 | 13.6 | 245.9 | 13.2 | 267.7 | 9.2 | 10.3 | 10.4 | 22.1 | 1.22 | 1.48 | 0.01 |
| 77 | 4 | 6 | 22 | 10.3 | 265.8 | 11.0 | 237.3 | 11.6 | 255.1 | 9.4 | 10.4 | 10.4 | 22.1 | 1.01 | 1.48 | 0.01 |
| 77 | 4 | 6 | 23 | 8.6 | 264.3 | 8.1 | 235.2 | 8.0 | 253.1 | 10.0 | 10.7 | 10.5 | 21.9 | 0.49 | 1.48 | 0.01 |
| 77 | 4 | 6 | 24 | 7.8 | 264.8 | 7.1 | 235.8 | 7.0 | 247.5 | 10.0 | 10.4 | 10.3 | 22.3 | 0.30 | 1.48 | 0.01 |
| 77 | 4 | 7 | 1 | 7.1 | 202.5 | 7.0 | 174.2 | 6.5 | 314.3 | 8.4 | 9.2 | 9.4 | 22.9 | 0.97 | 1.48 | 0.01 |
| 77 | 4 | 7 | 2 | 5.0 | 310.0 | 4.8 | 294.8 | 4.2 | 317.3 | 7.7 | 7.9 | 8.5 | 23.7 | 0.80 | 1.48 | 0.01 |
| 77 | 4 | 7 | 3 | 5.4 | 268.9 | 6.0 | 255.6 | 6.8 | 286.4 | 7.8 | 8.2 | 8.1 | 23.3 | 0.29 | 1.48 | 0.01 |
| 77 | 4 | 7 | 4 | 6.8 | 248.5 | 6.6 | 237.8 | 10.1 | 268.3 | 7.1 | 7.9 | 8.1 | 23.6 | 0.97 | 1.48 | 0.01 |
| 77 | 4 | 7 | 5 | 4.5 | 160.7 | 6.1 | 233.5 | 9.9 | 280.1 | 6.4 | 7.1 | 8.1 | 24.2 | 1.68 | 1.48 | 0.01 |
| 77 | 4 | 7 | 6 | 3.1 | 87.5 | 4.0 | 101.5 | 5.6 | 392.7 | 6.0 | 6.8 | 7.1 | 24.5 | 1.11 | 1.48 | 0.05 |
| 77 | 4 | 7 | 7 | 1.9 | 394.0 | 2.5 | 69.7 | 3.1 | 106.7 | 6.7 | 8.4 | 7.3 | 22.9 | 0.57 | 1.48 | 0.27 |
| 77 | 4 | 7 | 8 | 3.2 | 96.7 | 3.2 | 86.4 | 3.1 | 125.5 | 8.0 | 9.3 | 7.7 | 21.7 | -0.32 | 1.48 | 0.57 |
| 77 | 4 | 7 | 9 | 4.8 | 117.5 | 5.2 | 100.3 | 5.3 | 132.7 | 10.0 | 10.5 | 9.4 | 20.7 | -0.54 | 1.48 | 0.85 |
| 77 | 4 | 7 | 10 | 5.6 | 90.3 | 5.9 | 72.5 | 5.9 | 95.5 | 11.7 | 12.1 | 11.1 | 20.4 | -0.65 | 1.48 | 1.03 |
| 77 | 4 | 7 | 11 | 7.2 | 294.9 | 7.9 | 270.0 | 8.4 | 292.3 | 12.5 | 12.5 | 11.7 | 20.1 | -0.88 | 1.48 | [illegible] |
| 77 | 4 | 7 | 12 | 5.9 | 302.5 | 6.3 | 272.3 | 7.2 | 292.7 | 12.7 | 12.9 | 12.0 | 20.1 | -0.70 | 1.48 | 0.84 |
| 77 | 4 | 7 | 13 | 7.3 | 256.9 | 8.4 | 237.6 | 9.0 | 260.6 | 13.5 | 13.4 | 12.6 | 19.7 | -0.82 | 1.48 | 1.03 |
| 77 | 4 | 7 | 14 | 9.8 | 265.5 | 10.7 | 245.5 | 11.2 | 271.3 | 14.4 | 14.3 | 13.6 | 19.8 | -0.81 | 1.48 | 1.28 |
| 77 | 4 | 7 | 15 | 7.2 | 340.0 | 7.9 | 323.2 | 8.6 | 347.0 | 14.0 | 14.2 | 13.3 | 20.4 | -0.70 | 1.48 | 0.73 |
| 77 | 4 | 7 | 16 | 8.0 | 263.3 | 9.0 | 246.9 | 9.2 | 272.1 | 14.5 | 14.6 | 13.8 | 19.8 | -0.76 | 1.48 | 0.72 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 7 | 17 | 8.4 | 263.0 | 9.6 | 246.5 | 10.9 | 271.3 | 14.0 | 14.2 | 13.4 | 20.1 | -0.61 | 1.48 | 0.39 |
| 77 | 4 | 7 | 18 | 7.0 | 270.3 | 8.1 | 253.5 | 9.2 | 276.1 | 13.4 | 13.8 | 13.1 | 20.7 | -0.35 | 0.37 | 0.20 |
| 77 | 4 | 7 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 7 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 7 | 21 | 6.0 | 300.3 | 6.0 | 285.4 | 5.0 | 324.0 | 11.7 | 11.8 | 11.9 | 21.4 | 0.23 | 0.37 | 0.01 |
| 77 | 4 | 7 | 22 | 4.7 | 267.8 | 4.5 | 269.3 | 4.0 | 307.2 | 11.2 | 11.5 | 11.9 | 21.7 | 0.64 | 1.48 | 0.01 |
| 77 | 4 | 7 | 23 | 3.2 | 218.1 | 3.3 | 174.3 | 3.2 | 165.2 | 11.0 | 10.9 | 11.5 | 21.9 | 0.44 | 1.48 | 0.01 |
| 77 | 4 | 7 | 24 | 2.3 | 228.2 | 2.7 | 196.8 | 3.4 | 191.1 | 10.4 | 9.7 | 10.7 | 22.2 | 0.24 | 1.48 | 0.01 |
| 77 | 4 | 8 | 1 | 2.8 | 322.3 | 2.2 | 317.2 | 2.8 | 161.2 | 9.4 | 8.1 | 9.9 | 22.5 | 0.47 | 1.48 | 0.01 |
| 77 | 4 | 8 | 2 | 2.9 | 240.4 | 3.2 | 196.8 | 4.3 | 198.8 | 9.5 | 9.0 | 9.8 | 22.5 | 0.31 | 1.48 | 0.01 |
| 77 | 4 | 8 | 3 | 2.2 | 264.0 | 2.4 | 196.0 | 3.1 | 174.6 | 9.3 | 8.4 | 9.7 | 22.8 | 0.46 | 1.48 | 0.01 |
| 77 | 4 | 8 | 4 | 2.4 | 308.3 | 2.3 | 294.6 | 1.1 | 158.2 | 8.8 | 7.1 | 9.2 | 22.9 | 0.37 | 1.48 | 0.01 |
| 77 | 4 | 8 | 5 | 3.2 | 303.6 | 2.7 | 276.3 | 1.7 | 247.9 | 7.5 | 7.2 | 8.5 | 23.2 | 0.97 | 1.48 | 0.01 |
| 77 | 4 | 8 | 6 | 2.6 | 349.9 | 2.3 | 335.1 | 1.4 | 242.0 | 7.5 | 7.6 | 8.4 | 23.1 | 0.90 | 1.48 | 0.05 |
| 77 | 4 | 8 | 7 | 2.3 | 397.3 | 2.2 | 391.6 | 2.1 | 127.4 | 8.1 | 9.7 | 8.4 | 22.1 | 0.27 | 1.46 | 0.28 |
| 77 | 4 | 8 | 8 | 3.4 | 84.4 | 3.6 | 72.9 | 3.6 | 122.2 | 9.6 | 10.9 | 9.2 | 21.0 | -0.39 | 1.48 | 0.57 |
| 77 | 4 | 8 | 9 | 5.4 | 107.0 | 5.8 | 91.4 | 6.4 | 127.5 | 11.8 | 12.2 | 11.2 | 20.3 | -0.52 | 1.48 | 0.86 |
| 77 | 4 | 8 | 10 | 9.8 | 219.1 | 11.3 | 203.4 | 12.7 | 233.3 | 14.8 | 14.6 | 13.9 | 19.4 | -0.91 | 1.48 | 1.09 |
| 77 | 4 | 8 | 11 | 11.9 | 224.4 | 14.0 | 209.7 | 15.9 | 238.2 | 15.6 | 15.1 | 14.5 | 19.1 | -1.04 | 1.48 | 1.26 |
| 77 | 4 | 8 | 12 | 12.1 | 217.9 | 14.3 | 201.9 | 15.6 | 229.1 | 15.8 | 15.3 | 14.8 | 18.9 | -1.05 | 1.48 | 1.31 |
| 77 | 4 | 8 | 13 | 14.5 | 206.5 | 17.9 | 190.9 | 19.2 | 220.8 | 15.9 | 15.1 | 14.8 | 19.0 | -1.15 | 1.48 | 1.29 |
| 77 | 4 | 8 | 14 | 17.1 | 199.3 | 21.3 | 184.5 | 22.6 | 213.3 | 16.0 | 15.1 | 14.8 | 19.1 | -1.13 | 1.48 | 1.17 |
| 77 | 4 | 8 | 15 | 15.7 | 204.5 | 19.8 | 189.0 | 20.9 | 218.7 | 16.1 | 15.4 | 15.1 | 19.0 | -0.95 | 1.48 | 0.98 |
| 77 | 4 | 8 | 16 | 15.9 | 208.4 | 20.5 | 192.3 | 22.3 | 221.6 | 16.0 | 15.7 | 15.4 | 19.1 | -0.65 | 1.48 | 0.73 |
| 77 | 4 | 8 | 17 | 12.6 | 214.2 | 16.4 | 200.1 | 19.1 | 232.2 | 15.7 | 15.8 | 15.3 | 19.1 | -0.42 | 1.48 | 0.44 |
| 77 | 4 | 8 | 18 | 10.5 | 216.8 | 14.3 | 202.0 | 17.8 | 231.3 | 14.6 | 15.1 | 14.6 | 19.6 | -0.01 | 1.48 | 0.15 |
| 77 | 4 | 8 | 19 | 5.2 | 248.8 | 8.2 | 215.7 | 13.7 | 234.1 | 12.8 | 13.3 | 13.5 | 20.9 | 0.76 | 1.48 | 0.02 |
| 77 | 4 | 8 | 20 | 4.8 | 274.4 | 6.1 | 224.7 | 11.2 | 238.1 | 12.0 | 12.3 | 12.9 | 21.4 | 0.92 | 1.48 | 0.01 |
| 77 | 4 | 8 | 21 | 3.1 | 245.2 | 5.2 | 170.0 | 8.2 | 198.0 | 10.9 | 11.0 | 12.1 | 22.2 | 1.17 | 1.48 | 0.01 |
| 77 | 4 | 8 | 22 | 5.1 | 242.3 | 6.4 | 210.4 | 7.9 | 222.3 | 10.5 | 11.3 | 11.6 | 21.9 | 1.10 | 1.48 | 0.01 |
| 77 | 4 | 8 | 23 | 2.9 | 213.5 | 5.3 | 200.8 | 8.8 | 223.4 | 9.8 | 10.4 | 11.0 | 22.5 | 1.22 | 1.48 | 0.01 |
| 77 | 4 | 8 | 24 | 2.2 | 191.1 | 3.6 | 190.0 | 6.3 | 219.2 | 10.4 | 10.2 | 11.0 | 23.0 | 0.60 | 1.48 | 0.01 |
| 77 | 4 | 9 | 1 | 4.6 | 197.7 | 7.0 | 193.8 | 11.4 | 228.4 | 10.4 | 10.9 | 11.1 | 22.7 | 0.75 | 1.48 | 0.01 |
| 77 | 4 | 9 | 2 | 5.6 | 236.9 | 8.5 | 212.3 | 13.6 | 231.8 | 11.0 | 11.6 | 11.9 | 21.8 | 0.98 | 1.48 | 0.01 |
| 77 | 4 | 9 | 3 | 4.2 | 218.3 | 6.4 | 190.9 | 8.3 | 206.6 | 9.1 | 9.9 | 10.2 | 22.6 | 1.14 | 1.48 | 0.01 |
| 77 | 4 | 9 | 4 | 4.5 | 218.3 | 6.3 | 183.0 | 8.1 | 194.9 | 9.4 | 10.3 | 11.0 | 22.5 | 1.58 | 1.48 | 0.01 |
| 77 | 4 | 9 | 5 | 3.4 | 113.0 | 4.3 | 101.9 | 5.1 | 137.7 | 9.3 | 9.5 | 10.0 | 23.1 | 0.72 | 1.48 | 0.01 |
| 77 | 4 | 9 | 6 | 3.3 | 373.8 | 4.2 | 139.3 | 5.6 | 159.0 | 8.8 | 9.6 | 9.9 | 23.0 | 1.08 | 1.48 | 0.06 |
| 77 | 4 | 9 | 7 | 4.4 | 159.4 | 5.8 | 151.6 | 7.8 | 183.3 | 10.0 | 10.8 | 10.4 | 21.6 | 0.47 | 1.48 | 0.30 |
| 77 | 4 | 9 | 8 | 5.8 | 167.3 | 6.9 | 155.7 | 7.6 | 186.8 | 12.5 | 12.9 | 12.0 | 20.3 | -0.54 | 1.48 | 0.60 |
| 77 | 4 | 9 | 9 | 12.7 | 208.4 | 16.6 | 193.1 | 18.9 | 225.7 | 14.4 | 14.0 | 13.5 | 19.9 | -0.95 | 1.48 | 0.90 |
| 77 | 4 | 9 | 10 | 14.5 | 213.5 | 18.7 | 198.0 | 21.3 | 230.0 | 15.0 | 14.4 | 13.9 | 19.7 | -1.04 | 1.48 | 1.13 |
| 77 | 4 | 9 | 11 | 17.8 | 201.2 | 22.6 | 184.9 | 25.5 | 214.3 | 15.7 | 14.8 | 14.7 | 19.4 | -0.99 | 1.48 | 1.28 |
| 77 | 4 | 9 | 12 | 17.1 | 215.3 | 21.6 | 201.6 | 24.7 | 234.9 | 16.9 | 16.0 | 15.8 | 18.9 | -1.07 | 1.48 | 1.34 |
| 77 | 4 | 9 | 13 | 18.7 | 210.7 | 23.7 | 197.9 | 26.6 | 230.0 | 17.4 | 16.5 | 16.5 | 18.7 | -0.90 | 1.11 | 1.32 |
| 77 | 4 | 9 | 14 | 19.1 | 209.3 | 24.2 | 195.5 | 26.5 | 225.3 | 17.3 | 16.4 | 16.4 | 18.8 | -0.93 | 1.48 | 1.17 |
| 77 | 4 | 9 | 15 | 17.4 | 200.0 | 21.5 | 186.6 | 23.2 | 214.9 | 17.7 | 17.0 | 16.7 | 18.6 | -0.94 | 1.48 | 0.98 |
| 77 | 4 | 9 | 16 | 15.7 | 216.5 | 20.3 | 200.8 | 25.1 | 231.5 | 17.8 | 17.4 | 17.1 | 18.5 | -0.66 | 1.48 | 0.77 |
| 77 | 4 | 9 | 17 | 14.2 | 214.9 | 18.3 | 200.0 | 20.9 | 230.1 | 17.2 | 17.2 | 16.8 | 18.7 | -0.40 | 1.48 | 0.43 |
| 77 | 4 | 9 | 18 | 10.4 | 217.8 | 13.8 | 201.9 | 17.0 | 230.3 | 16.0 | 16.4 | 15.9 | 19.3 | -0.09 | 1.48 | 0.14 |
| 77 | 4 | 9 | 19 | 6.3 | 264.3 | 8.3 | 227.9 | 13.7 | 241.0 | 14.1 | 14.5 | 14.9 | 20.4 | 0.83 | 1.48 | 0.02 |
| 77 | 4 | 9 | 20 | 8.8 | 267.8 | 10.8 | 230.1 | 14.3 | 236.6 | 13.2 | 14.1 | 15.1 | 20.7 | 1.90 | 1.48 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 4 | 9 | 21 | 9.2 | 268.7 | 10.6 | 232.8 | 14.3 | 240.4 | 13.2 | 14.0 | 14.9 | 20.8 | 1.75 | 1.48 | 0.01 |
| 77 | 4 | 9 | 22 | 9.1 | 266.9 | 10.2 | 232.0 | 12.5 | 241.5 | 13.1 | 13.9 | 14.4 | 20.7 | 1.31 | 1.48 | 0.01 |
| 77 | 4 | 9 | 23 | 3.7 | 206.7 | 5.1 | 224.8 | 7.0 | 226.2 | 12.3 | 12.8 | 13.4 | 21.3 | 1.16 | 1.48 | 0.01 |
| 77 | 4 | 9 | 24 | 4.4 | 256.0 | 6.1 | 223.1 | 9.0 | 222.4 | 11.4 | 11.9 | 12.6 | 21.7 | 1.16 | 1.48 | 0.01 |
| 77 | 4 | 10 | 1 | 5.2 | 261.3 | 7.3 | 222.3 | 11.4 | 228.6 | 11.6 | 12.2 | 12.8 | 21.7 | 1.23 | 1.48 | 0.01 |
| 77 | 4 | 10 | 2 | 5.9 | 269.3 | 8.1 | 227.8 | 14.4 | 238.5 | 11.1 | 11.6 | 12.3 | 21.9 | 1.13 | 1.48 | 0.01 |
| 77 | 4 | 10 | 3 | 5.9 | 262.3 | 7.7 | 231.1 | 14.4 | 246.3 | 10.5 | 10.8 | 10.9 | 22.1 | 0.41 | 1.48 | 0.01 |
| 77 | 4 | 10 | 4 | 6.1 | 240.6 | 8.9 | 220.7 | 16.0 | 241.5 | 9.9 | 10.4 | 10.8 | 22.4 | 0.84 | 1.48 | 0.01 |
| 77 | 4 | 10 | 5 | 7.5 | 241.3 | 11.3 | 212.1 | 17.0 | 229.7 | 9.3 | 10.1 | 10.5 | 22.6 | 1.26 | 1.48 | 0.01 |
| 77 | 4 | 10 | 6 | 6.8 | 262.1 | 9.6 | 227.6 | 16.0 | 236.9 | 9.1 | 9.5 | 10.2 | 22.5 | 1.16 | 1.48 | 0.06 |
| 77 | 4 | 10 | 7 | 10.1 | 215.9 | 13.3 | 202.0 | 17.1 | 230.4 | 11.0 | 11.2 | 10.7 | 21.4 | -0.32 | 1.48 | 0.30 |
| 77 | 4 | 10 | 8 | 15.1 | 207.7 | 18.4 | 195.1 | 19.3 | 227.5 | 12.6 | 12.3 | 11.8 | 20.6 | -0.74 | 1.48 | 0.62 |
| 77 | 4 | 10 | 9 | 13.8 | 218.3 | 17.0 | 203.5 | 20.1 | 236.9 | 13.6 | 13.2 | 12.6 | 20.2 | -1.00 | 1.48 | 0.90 |
| 77 | 4 | 10 | 10 | 15.4 | 214.4 | 19.9 | 200.0 | 22.8 | 234.6 | 14.5 | 13.8 | 13.4 | 19.8 | -1.08 | 1.48 | 1.13 |
| 77 | 4 | 10 | 11 | 18.7 | 207.3 | 23.5 | 191.6 | 25.2 | 221.8 | 14.9 | 13.9 | 13.9 | 19.6 | -0.96 | 1.48 | 1.26 |
| 77 | 4 | 10 | 12 | 16.8 | 208.7 | 20.9 | 194.1 | 23.2 | 224.5 | 15.6 | 14.6 | 14.5 | 19.3 | -1.19 | 1.48 | 1.31 |
| 77 | 4 | 10 | 13 | 15.3 | 206.4 | 19.1 | 190.1 | 20.4 | 221.4 | 16.1 | 15.2 | 15.0 | 19.0 | -1.09 | 1.48 | 1.25 |
| 77 | 4 | 10 | 14 | 13.8 | 218.6 | 17.1 | 202.3 | 19.5 | 235.2 | 16.7 | 15.9 | 15.5 | 18.8 | -1.14 | 1.48 | 1.16 |
| 77 | 4 | 10 | 15 | 10.9 | 228.0 | 13.4 | 210.8 | 15.5 | 243.7 | 16.8 | 16.3 | 15.6 | 18.6 | -1.18 | 1.48 | 1.00 |
| 77 | 4 | 10 | 16 | 11.8 | 230.5 | 14.3 | 213.6 | 16.9 | 244.0 | 16.8 | 16.6 | 15.9 | 18.7 | -0.91 | 1.48 | 0.76 |
| 77 | 4 | 10 | 17 | 9.6 | 261.8 | 10.9 | 244.6 | 12.6 | 268.1 | 16.3 | 16.5 | 15.6 | 18.8 | -0.68 | 1.48 | 0.43 |
| 77 | 4 | 10 | 18 | 9.5 | 277.7 | 11.8 | 259.8 | 13.8 | 283.4 | 15.0 | 15.5 | 14.8 | 19.8 | -0.13 | 1.48 | 0.12 |
| 77 | 4 | 10 | 19 | 10.0 | 286.5 | 12.8 | 276.3 | 14.2 | 300.8 | 13.3 | 14.4 | 14.3 | 20.8 | 1.01 | 1.48 | 0.02 |
| 77 | 4 | 10 | 20 | 9.4 | 305.9 | 11.4 | 300.1 | 12.4 | 329.8 | 12.5 | 13.7 | 13.6 | 21.3 | 1.12 | 1.48 | 0.01 |
| 77 | 4 | 10 | 21 | 11.7 | 338.1 | 14.5 | 326.9 | 16.2 | 359.5 | 11.6 | 12.7 | 12.5 | 21.5 | 0.91 | 1.48 | 0.01 |
| 77 | 4 | 10 | 22 | 11.6 | 24.4 | 13.4 | 11.4 | 15.1 | 37.6 | 10.6 | 10.9 | 10.5 | 21.8 | -0.13 | 1.48 | 0.01 |
| 77 | 4 | 10 | 23 | 14.0 | 27.1 | 15.7 | 12.3 | 17.0 | 39.2 | 9.8 | 10.0 | 9.5 | 22.1 | -0.26 | 1.48 | 0.01 |
| 77 | 4 | 10 | 24 | 7.4 | 43.9 | 9.3 | 30.6 | 11.1 | 54.3 | 9.0 | 9.3 | 8.8 | 22.3 | -0.20 | 1.48 | 0.01 |
| 77 | 4 | 11 | 1 | 6.1 | 90.6 | 7.2 | 63.1 | 8.4 | 77.0 | 8.4 | 8.8 | 8.5 | 22.6 | 0.05 | 1.48 | 0.01 |
| 77 | 4 | 11 | 2 | 4.6 | 299.3 | 4.8 | 333.1 | 5.7 | 23.5 | 7.8 | 8.0 | 8.1 | 22.9 | 0.24 | 1.48 | 0.01 |
| 77 | 4 | 11 | 3 | 3.3 | 347.0 | 5.3 | 368.2 | 7.7 | 45.2 | 6.9 | 7.5 | 7.6 | 23.2 | 0.66 | 1.48 | 0.01 |
| 77 | 4 | 11 | 4 | 4.2 | 295.8 | 4.3 | 107.8 | 5.5 | 123.5 | 5.9 | 6.0 | 6.2 | 23.7 | 0.22 | 1.48 | 0.01 |
| 77 | 4 | 11 | 5 | 3.3 | 356.5 | 3.7 | 375.9 | 4.2 | 45.4 | 5.7 | 5.9 | 5.8 | 23.6 | 0.09 | 1.48 | 0.01 |
| 77 | 4 | 11 | 6 | 8.3 | 358.1 | 9.8 | 349.6 | 11.1 | 387.7 | 5.1 | 5.7 | 5.5 | 23.7 | 0.45 | 1.48 | 0.08 |
| 77 | 4 | 11 | 7 | 7.6 | 111.9 | 8.4 | 93.4 | 9.2 | 120.0 | 5.2 | 5.9 | 4.7 | 23.3 | -0.57 | 1.48 | 0.32 |
| 77 | 4 | 11 | 8 | 7.8 | 178.1 | 9.2 | 159.7 | 9.4 | 186.0 | 5.5 | 5.6 | 4.8 | 23.3 | -0.66 | 1.48 | 0.30 |
| 77 | 4 | 11 | 9 | 12.9 | 215.5 | 17.0 | 199.4 | 19.7 | 228.0 | 5.1 | 5.1 | 4.5 | 26.7 | -0.55 | 1.48 | 0.14 |
| 77 | 4 | 11 | 10 | 5.4 | 448.9 | 5.9 | 430.8 | 6.4 | 159.3 | 5.2 | 5.4 | 4.7 | 26.1 | -0.50 | 1.48 | 0.25 |
| 77 | 4 | 11 | 11 | 7.0 | 163.2 | 7.8 | 143.9 | 8.2 | 166.1 | 7.5 | 7.5 | 6.7 | 21.8 | -0.86 | 1.48 | 1.16 |
| 77 | 4 | 11 | 12 | 8.2 | 157.9 | 9.7 | 143.8 | 11.4 | 163.2 | 7.2 | 7.2 | 6.5 | 26.6 | -0.61 | 1.53 | 0.52 |
| 77 | 4 | 11 | 13 | 8.8 | 246.6 | 10.1 | 243.0 | 12.6 | 255.0 | 5.7 | 5.8 | 5.5 | 44.1 | -0.18 | 0.84 | 0.26 |
| 77 | 4 | 11 | 14 | 15.6 | 295.9 | 17.3 | 292.5 | 18.1 | 298.4 | 5.9 | 5.6 | 5.0 | 37.1 | -0.83 | 1.26 | 0.99 |
| 77 | 4 | 11 | 15 | 13.9 | 268.8 | 15.6 | 265.9 | 16.8 | 274.3 | 6.4 | 6.1 | 5.6 | 28.8 | -0.77 | 1.68 | 0.90 |
| 77 | 4 | 11 | 16 | 11.9 | 278.6 | 13.8 | 275.3 | 14.7 | 283.6 | 6.7 | 6.6 | 6.0 | 26.0 | -0.75 | 1.68 | 0.53 |
| 77 | 4 | 11 | 17 | 12.1 | 295.0 | 13.5 | 290.8 | 14.4 | 299.4 | 6.4 | 6.5 | 5.8 | 27.4 | -0.61 | 1.68 | 0.26 |
| 77 | 4 | 11 | 18 | 9.5 | 278.3 | 11.0 | 274.0 | 12.1 | 282.7 | 5.9 | 6.0 | 5.4 | 27.8 | -0.49 | 1.68 | 0.07 |
| 77 | 4 | 11 | 19 | 7.0 | 214.8 | 9.3 | 221.0 | 12.4 | 235.3 | 4.4 | 4.6 | 4.1 | 34.6 | -0.28 | 1.68 | 0.02 |
| 77 | 4 | 11 | 20 | 6.7 | 249.5 | 8.4 | 244.9 | 11.2 | 253.8 | 4.2 | 4.6 | 4.1 | 35.3 | -0.05 | 1.68 | 0.01 |
| 77 | 4 | 11 | 21 | 7.6 | 263.9 | 8.9 | 257.4 | 11.1 | 267.5 | 3.9 | 4.1 | 3.6 | 35.7 | -0.28 | 1.68 | 0.03 |
| 77 | 4 | 11 | 22 | 12.0 | 292.6 | 14.4 | 290.5 | 16.5 | 301.0 | 2.1 | 2.1 | 1.7 | 56.1 | -0.38 | 1.68 | 0.03 |
| 77 | 4 | 11 | 23 | 11.3 | 255.4 | 13.8 | 255.9 | 16.8 | 268.4 | 1.1 | 0.9 | 0.7 | 66.0 | -0.35 | 1.70 | 0.03 |
| 77 | 4 | 11 | 24 | 10.9 | 268.6 | 13.4 | 266.5 | 16.1 | 278.0 | 0.6 | 0.4 | 0.3 | 68.5 | -0.28 | 1.72 | 0.03 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 12 | 1 | 9.5 | 256.7 | 12.1 | 257.4 | 13.9 | 272.5 | 0.3 | 0.3 | 0.1 | 65.9 | -0.27 | 1.72 | 0.02 |
| 77 | 4 | 12 | 2 | 9.6 | 268.5 | 12.7 | 268.9 | 15.0 | 286.6 | 0.7 | 0.6 | 0.7 | 64.7 | -0.03 | 1.72 | 0.03 |
| 77 | 4 | 12 | 3 | 7.9 | 267.9 | 10.4 | 269.8 | 11.6 | 291.1 | 0.7 | 0.6 | 0.8 | 67.6 | 0.13 | 1.78 | 0.03 |
| 77 | 4 | 12 | 4 | 8.2 | 300.7 | 10.0 | 299.2 | 11.4 | 312.4 | 1.0 | 1.1 | 0.9 | 66.0 | -0.08 | 1.80 | 0.02 |
| 77 | 4 | 12 | 5 | 10.3 | 296.3 | 13.0 | 294.1 | 14.7 | 306.3 | 0.8 | 0.8 | 0.8 | 67.1 | -0.06 | 1.80 | 0.02 |
| 77 | 4 | 12 | 6 | 11.7 | 308.9 | 14.0 | 306.3 | 15.4 | 317.8 | 0.8 | 0.9 | 0.8 | 66.1 | -0.04 | 1.80 | 0.03 |
| 77 | 4 | 12 | 7 | 10.5 | 324.7 | 12.2 | 322.7 | 13.9 | 332.9 | 0.9 | 1.1 | 0.8 | 67.2 | -0.14 | 1.80 | 0.11 |
| 77 | 4 | 12 | 8 | 10.1 | 351.8 | 11.1 | 350.4 | 11.7 | 361.0 | 1.0 | 1.1 | 0.7 | 68.0 | -0.35 | 1.80 | 0.20 |
| 77 | 4 | 12 | 9 | 12.2 | 17.8 | 13.3 | 15.7 | 13.9 | 24.9 | 0.9 | 0.9 | 0.5 | 64.5 | -0.40 | 1.80 | 0.25 |
| 77 | 4 | 12 | 10 | 9.7 | 12.9 | 10.5 | 11.8 | 10.5 | 20.1 | 1.2 | 1.1 | 0.8 | 63.3 | -0.41 | 1.80 | 0.31 |
| 77 | 4 | 12 | 11 | 11.0 | 19.4 | 12.2 | 19.0 | 12.5 | 29.3 | 1.6 | 1.5 | 1.1 | 60.8 | -0.48 | 1.80 | 0.36 |
| 77 | 4 | 12 | 12 | 8.5 | 371.5 | 9.4 | 370.5 | 9.9 | 22.8 | 1.9 | 1.6 | 1.4 | 59.5 | -0.52 | 1.80 | 0.55 |
| 77 | 4 | 12 | 13 | 10.3 | 369.3 | 11.2 | 368.5 | 11.7 | 20.8 | 2.5 | 2.4 | 1.9 | 57.0 | -0.59 | 1.80 | 0.51 |
| 77 | 4 | 12 | 14 | 10.0 | 16.8 | 10.9 | 17.0 | 11.3 | 29.3 | 3.5 | 3.4 | 2.8 | 45.2 | -0.74 | 1.80 | 0.51 |
| 77 | 4 | 12 | 15 | 8.2 | 27.0 | 8.9 | 25.8 | 8.9 | 37.8 | 4.1 | 4.1 | 3.5 | 38.7 | -0.60 | 1.80 | 0.38 |
| 77 | 4 | 12 | 16 | 5.2 | 51.2 | 5.9 | 46.3 | 6.2 | 57.1 | 4.9 | 5.1 | 4.4 | 25.5 | -0.58 | 1.80 | 0.47 |
| 77 | 4 | 12 | 17 | 3.4 | 395.4 | 3.7 | 33.6 | 4.0 | 52.0 | 5.0 | 5.2 | 4.5 | 26.3 | -0.51 | 1.80 | 0.16 |
| 77 | 4 | 12 | 18 | 5.1 | 384.2 | 5.5 | 383.2 | 5.7 | 32.9 | 4.5 | 4.6 | 4.0 | 29.6 | -0.42 | 1.80 | 0.09 |
| 77 | 4 | 12 | 19 | 5.1 | 332.9 | 6.6 | 345.2 | 8.0 | 365.0 | 3.7 | 4.1 | 3.8 | 37.8 | 0.08 | 1.80 | 0.02 |
| 77 | 4 | 12 | 20 | 8.1 | 328.4 | 10.0 | 332.3 | 12.0 | 350.0 | 3.0 | 3.5 | 3.3 | 41.5 | 0.27 | 1.80 | 0.01 |
| 77 | 4 | 12 | 21 | 11.7 | 335.4 | 13.6 | 333.5 | 15.5 | 345.1 | 2.5 | 2.7 | 2.3 | 49.6 | -0.21 | 1.80 | 0.01 |
| 77 | 4 | 12 | 22 | 9.1 | 317.4 | 10.8 | 320.1 | 12.9 | 339.6 | 1.5 | 1.9 | 1.6 | 54.8 | 0.05 | 1.80 | 0.01 |
| 77 | 4 | 12 | 23 | 4.0 | 296.8 | 4.1 | 317.3 | 5.3 | 361.5 | 1.8 | 2.0 | 1.9 | 53.5 | 0.09 | 1.80 | 0.01 |
| 77 | 4 | 12 | 24 | 2.2 | 285.7 | 2.0 | 386.9 | 2.4 | 86.7 | 1.9 | 1.2 | 1.8 | 53.4 | -0.16 | 1.80 | 0.01 |
| 77 | 4 | 13 | 1 | 2.2 | 214.1 | 1.9 | 193.1 | 1.8 | 173.7 | 1.6 | 0.8 | 1.4 | 56.6 | -0.18 | 1.80 | 0.01 |
| 77 | 4 | 13 | 2 | 3.0 | 244.3 | 2.8 | 173.5 | 3.1 | 184.7 | 0.9 | 0.6 | 0.8 | 59.2 | -0.09 | 1.80 | 0.01 |
| 77 | 4 | 13 | 3 | 3.1 | 286.5 | 3.5 | 318.0 | 4.1 | 332.6 | 0.6 | 0.7 | 0.3 | 65.7 | -0.24 | 1.80 | 0.01 |
| 77 | 4 | 13 | 4 | 2.3 | 109.9 | 2.4 | 89.5 | 2.6 | 86.5 | 0.2 | 0.5 | -0.0 | 72.2 | -0.26 | 1.80 | 0.01 |
| 77 | 4 | 13 | 5 | 4.2 | 159.9 | 5.0 | 155.2 | 5.8 | 157.2 | -0.3 | -0.0 | -0.6 | 69.6 | -0.31 | 1.80 | 0.01 |
| 77 | 4 | 13 | 6 | 5.7 | 194.1 | 8.2 | 195.3 | 11.7 | 209.8 | -0.3 | -0.0 | -1.6 | 74.2 | -1.36 | 1.90 | 0.02 |
| 77 | 4 | 13 | 7 | 3.1 | 198.2 | 3.3 | 184.4 | 3.9 | 199.0 | -0.2 | 0.0 | 0.1 | 78.1 | 0.22 | 1.96 | 0.14 |
| 77 | 4 | 13 | 8 | 2.8 | 163.2 | 3.2 | 161.9 | 3.7 | 170.3 | 0.4 | 0.9 | 0.2 | 66.9 | -0.22 | 1.96 | 0.37 |
| 77 | 4 | 13 | 9 | 4.5 | 152.0 | 5.1 | 153.6 | 5.8 | 167.3 | 1.3 | 1.8 | 0.9 | 49.3 | -0.38 | 1.96 | 0.53 |
| 77 | 4 | 13 | 10 | 10.0 | 260.7 | 10.8 | 253.4 | 11.4 | 256.0 | 2.1 | 2.0 | 1.5 | 50.4 | -0.62 | 1.96 | 0.98 |
| 77 | 4 | 13 | 11 | 9.7 | 236.3 | 11.3 | 230.8 | 13.3 | 240.3 | 3.9 | 3.9 | 3.1 | 36.7 | -0.84 | 1.96 | 0.84 |
| 77 | 4 | 13 | 12 | 8.1 | 209.8 | 9.3 | 208.5 | 10.4 | 223.4 | 2.7 | 2.6 | 2.1 | 45.1 | -0.60 | 2.01 | 0.39 |
| 77 | 4 | 13 | 13 | 11.4 | 220.7 | 13.6 | 219.2 | 16.5 | 235.3 | 3.5 | 3.3 | 2.9 | 41.5 | -0.58 | 2.12 | 0.94 |
| 77 | 4 | 13 | 14 | 13.4 | 265.0 | 14.8 | 258.8 | 15.9 | 265.9 | 4.4 | 3.8 | 3.7 | 33.6 | -0.68 | 2.16 | 0.98 |
| 77 | 4 | 13 | 15 | 10.8 | 252.1 | 12.2 | 246.3 | 13.7 | 255.7 | 6.2 | 6.1 | 5.5 | 24.1 | -0.69 | 2.16 | 0.77 |
| 77 | 4 | 13 | 16 | 11.2 | 258.3 | 12.7 | 253.8 | 14.4 | 262.9 | 6.7 | 6.7 | 6.0 | 23.5 | -0.70 | 2.16 | 0.44 |
| 77 | 4 | 13 | 17 | 6.9 | 243.4 | 8.0 | 239.0 | 9.5 | 249.0 | 6.7 | 6.9 | 6.1 | 23.7 | -0.60 | 2.16 | 0.23 |
| 77 | 4 | 13 | 18 | 5.1 | 208.2 | 6.6 | 206.1 | 7.9 | 219.9 | 6.1 | 6.4 | 5.9 | 24.1 | -0.28 | 2.16 | 0.10 |
| 77 | 4 | 13 | 19 | 5.2 | 239.8 | 6.3 | 218.6 | 7.3 | 213.0 | 5.2 | 5.7 | 5.6 | 25.8 | 0.39 | 2.16 | 0.01 |
| 77 | 4 | 13 | 20 | 5.9 | 241.5 | 8.2 | 218.5 | 10.7 | 210.9 | 4.3 | 5.0 | 5.2 | 26.4 | 0.86 | 2.16 | 0.01 |
| 77 | 4 | 13 | 21 | 6.2 | 246.8 | 8.0 | 222.0 | 9.6 | 215.0 | 4.5 | 5.2 | 5.4 | 25.7 | 0.86 | 2.16 | 0.01 |
| 77 | 4 | 13 | 22 | 5.8 | 259.3 | 6.8 | 234.5 | 10.8 | 224.8 | 4.3 | 4.7 | 4.9 | 25.6 | 0.63 | 2.16 | 0.01 |
| 77 | 4 | 13 | 23 | 8.8 | 254.2 | 9.8 | 234.6 | 11.6 | 222.2 | 5.1 | 5.8 | 6.4 | 25.5 | 1.32 | 2.16 | 0.01 |
| 77 | 4 | 13 | 24 | 8.4 | 253.0 | 8.0 | 241.6 | 7.6 | 239.8 | 6.7 | 7.3 | 7.3 | 24.3 | 0.59 | 2.16 | 0.01 |
| 77 | 4 | 14 | 1 | 3.0 | 370.8 | 3.3 | 356.1 | 4.1 | 167.3 | 4.2 | 4.7 | 5.7 | 24.8 | 1.44 | 2.16 | 0.01 |
| 77 | 4 | 14 | 2 | 3.3 | 302.6 | 2.8 | 319.1 | 3.3 | 130.1 | 2.5 | 1.8 | 2.8 | 26.3 | 0.32 | 2.16 | 0.01 |
| 77 | 4 | 14 | 3 | 4.1 | 259.2 | 3.5 | 261.8 | 2.7 | 269.4 | 4.2 | 4.2 | 4.4 | 25.3 | 0.13 | 2.16 | 0.01 |
| 77 | 4 | 14 | 4 | 3.2 | 213.1 | 4.1 | 209.2 | 4.2 | 200.5 | 4.6 | 5.0 | 5.1 | 24.9 | 0.48 | 2.16 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 14 | 5 | 2.7 | 234.4 | 2.5 | 175.4 | 5.3 | 168.0 | 4.0 | 3.5 | 4.5 | 25.6 | 0.55 | 2.16 | 0.01 |
| 77 | 4 | 14 | 6 | 2.6 | 324.6 | 1.9 | 316.6 | 2.2 | 150.8 | 2.9 | 3.0 | 4.7 | 25.4 | 1.75 | 2.16 | 0.07 |
| 77 | 4 | 14 | 7 | 2.3 | 361.9 | 1.9 | 361.8 | 2.5 | 147.5 | 4.3 | 5.7 | 4.5 | 24.2 | 0.20 | 2.16 | 0.30 |
| 77 | 4 | 14 | 8 | 3.2 | 102.8 | 3.6 | 103.6 | 3.8 | 137.1 | 6.4 | 7.7 | 5.9 | 22.4 | -0.43 | 2.16 | 0.60 |
| 77 | 4 | 14 | 9 | 5.2 | 144.1 | 5.4 | 144.5 | 5.4 | 155.8 | 8.7 | 9.1 | 8.0 | 21.6 | -0.64 | 2.16 | 0.86 |
| 77 | 4 | 14 | 10 | 7.8 | 142.3 | 9.3 | 142.7 | 9.9 | 157.5 | 10.5 | 10.6 | 9.8 | 21.0 | -0.74 | 2.16 | 0.62 |
| 77 | 4 | 14 | 11 | 11.5 | 247.3 | 14.5 | 208.7 | 17.0 | 225.2 | 13.8 | 11.9 | 14.4 | 20.6 | 0.57 | 2.16 | 1.20 |
| 77 | 4 | 14 | 12 | 13.8 | 205.7 | 17.1 | 206.5 | 20.6 | 223.2 | 30.5 | 12.3 | 27.9 | 20.3 | -2.66 | 2.16 | 1.37 |
| 77 | 4 | 14 | 13 | 15.1 | 200.8 | 19.4 | 201.6 | 22.5 | 216.8 | 30.9 | 12.1 | 28.1 | 20.6 | -2.76 | 2.16 | 0.79 |
| 77 | 4 | 14 | 14 | 12.4 | 270.0 | 14.4 | 264.6 | 16.1 | 275.0 | 30.9 | 11.5 | 28.1 | 21.0 | -2.75 | 2.16 | 0.60 |
| 77 | 4 | 14 | 15 | 11.2 | 284.3 | 12.4 | 280.8 | 15.0 | 287.8 | 30.9 | 11.9 | 28.1 | 20.7 | -2.75 | 2.16 | 0.73 |
| 77 | 4 | 14 | 16 | 11.0 | 294.5 | 12.4 | 287.9 | 15.3 | 298.4 | 30.0 | 11.6 | 27.5 | 21.0 | -2.45 | 2.16 | 0.46 |
| 77 | 4 | 14 | 17 | 18.3 | 310.8 | 21.6 | 300.6 | 23.8 | 316.4 | 30.8 | 9.9 | 28.2 | 22.0 | -2.57 | 2.16 | 0.17 |
| 77 | 4 | 14 | 18 | 24.7 | 323.6 | 28.9 | 302.6 | 31.8 | 327.0 | 29.7 | 7.5 | 29.5 | 23.1 | -0.18 | 2.16 | 0.07 |
| 77 | 4 | 14 | 19 | 24.1 | 305.5 | 28.9 | 293.7 | 32.3 | 310.8 | 31.0 | 4.6 | 30.6 | 24.3 | -0.36 | 2.16 | 0.01 |
| 77 | 4 | 14 | 20 | 19.6 | 310.0 | 23.4 | 295.3 | 26.6 | 314.3 | 31.2 | 3.0 | 30.6 | 25.1 | -0.64 | 2.16 | 0.00 |
| 77 | 4 | 14 | 21 | 7.6 | 320.4 | 9.3 | 310.0 | 10.4 | 328.9 | 16.1 | 2.3 | 25.0 | 25.4 | 8.96 | 2.16 | 0.00 |
| 77 | 4 | 14 | 22 | 2.9 | 335.0 | 3.8 | 343.0 | 5.1 | 364.0 | 2.3 | 0.0 | 2.4 | 28.7 | 0.15 | 2.16 | 0.00 |
| 77 | 4 | 14 | 23 | 4.6 | 333.7 | 6.6 | 352.5 | 8.7 | 363.0 | 3.6 | -0.2 | 3.8 | 27.7 | 0.17 | 2.16 | 0.00 |
| 77 | 4 | 14 | 24 | 8.3 | 8.6 | 10.1 | 15.0 | 11.8 | 26.2 | 5.6 | -0.5 | 5.8 | 28.4 | 0.19 | 2.16 | 0.00 |
| 77 | 4 | 15 | 1 | 8.0 | 17.7 | 9.4 | 23.3 | 10.7 | 31.8 | 7.2 | -0.7 | 7.4 | 28.1 | 0.17 | 2.16 | 0.00 |
| 77 | 4 | 15 | 2 | 8.3 | 15.9 | 9.7 | 20.6 | 11.1 | 29.2 | 8.4 | -1.1 | 8.6 | 27.8 | 0.15 | 2.16 | 0.00 |
| 77 | 4 | 15 | 3 | 6.6 | 38.9 | 7.9 | 41.1 | 9.1 | 46.6 | 9.4 | -1.5 | 9.5 | 27.8 | 0.12 | 2.16 | 0.00 |
| 77 | 4 | 15 | 4 | 6.8 | 17.0 | 7.8 | 20.9 | 8.7 | 27.3 | 10.2 | -1.8 | 10.4 | 28.2 | 0.13 | 2.16 | 0.00 |
| 77 | 4 | 15 | 5 | 10.0 | 6.3 | 11.2 | 9.7 | 12.2 | 17.6 | 11.0 | -1.7 | 11.1 | 28.2 | 0.12 | 2.16 | 0.00 |
| 77 | 4 | 15 | 6 | 10.6 | 14.7 | 11.8 | 17.0 | 12.5 | 22.9 | 11.6 | -2.8 | 11.7 | 46.9 | 0.11 | 2.16 | 0.01 |
| 77 | 4 | 15 | 7 | 10.7 | 17.9 | 12.1 | 19.8 | 13.3 | 25.0 | 12.1 | -2.9 | 12.2 | 65.6 | 0.10 | 2.16 | 0.05 |
| 77 | 4 | 15 | 8 | 9.6 | 12.6 | 10.6 | 14.0 | 11.4 | 18.2 | 12.1 | -2.2 | 12.2 | 65.8 | 0.07 | 2.18 | 0.10 |
| 77 | 4 | 15 | 9 | 13.1 | 14.3 | 14.5 | 15.6 | 15.3 | 22.3 | 12.2 | -1.1 | 12.3 | 64.6 | 0.09 | 2.20 | 0.26 |
| 77 | 4 | 15 | 10 | 15.7 | 13.3 | 17.5 | 15.7 | 18.4 | 22.4 | 13.1 | -0.3 | 13.2 | 69.7 | 0.10 | 2.20 | 0.27 |
| 77 | 4 | 15 | 11 | 15.3 | 9.4 | 17.0 | 11.7 | 17.9 | 19.2 | 13.8 | 0.4 | 13.9 | 65.1 | 0.09 | 1.10 | 0.34 |
| 77 | 4 | 15 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 4 | 15 | 20 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 1.10 | 0.36 |
| 77 | 4 | 15 | 21 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 15 | 22 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 15 | 23 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 15 | 24 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.35 |
| 77 | 4 | 16 | 1 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 2 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 3 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 4 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 5 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 6 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 7 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 8 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 4 | 16 | 9 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 10 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 11 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 12 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 13 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 14 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 15 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 16 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 17 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 18 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 19 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 20 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 21 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 22 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 23 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 16 | 24 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 17 | 1 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 17 | 2 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 17 | 3 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |
| 77 | 4 | 17 | 4 | 16.6 | 5.0 | 18.4 | 6.7 | 19.3 | 15.0 | 13.8 | 0.4 | 13.9 | 63.8 | 0.08 | 2.20 | 0.36 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL. HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 16 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 16 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 17 | 12 | 14.4 | 231.3 | 20.0 | 185.9 | 21.3 | 240.7 | 10.3 | 9.7 | 9.4 | 21.0 | -0.94 | 6.08 | 1.37 |
| 77 | 5 | 17 | 13 | 16.3 | 229.2 | 20.5 | 199.6 | 23.3 | 233.3 | 10.7 | 10.0 | 9.8 | 20.9 | -0.98 | 12.16 | 1.04 |
| 77 | 5 | 17 | 14 | 15.1 | 228.4 | 19.3 | 201.5 | 22.9 | 236.4 | 11.2 | 10.7 | 10.4 | 20.7 | -0.88 | 12.16 | 0.76 |
| 77 | 5 | 17 | 15 | 11.2 | 277.5 | 13.4 | 245.7 | 15.4 | 266.0 | 10.2 | 10.2 | 9.6 | 21.1 | -0.69 | 12.16 | 0.36 |
| 77 | 5 | 17 | 16 | 11.5 | 284.8 | 12.7 | 244.0 | 14.9 | 271.0 | 10.3 | 10.1 | 9.5 | 20.9 | -0.82 | 6.08 | 0.57 |
| 77 | 5 | 17 | 17 | 10.3 | 317.2 | 11.8 | 276.8 | 12.8 | 312.6 | 8.7 | 8.7 | 8.0 | 21.7 | -0.68 | 0.00 | 0.26 |
| 77 | 5 | 17 | 18 | 13.3 | 344.9 | 15.4 | 304.4 | 17.0 | 343.1 | 6.8 | 6.9 | 6.2 | 22.9 | -0.57 | 0.00 | 0.17 |
| 77 | 5 | 17 | 19 | 10.1 | 333.4 | 12.3 | 295.7 | 14.0 | 337.9 | 5.8 | 6.0 | 5.5 | 23.6 | -0.30 | 0.00 | 0.03 |
| 77 | 5 | 17 | 20 | 11.0 | 332.0 | 13.8 | 294.0 | 15.7 | 336.6 | 5.2 | 5.5 | 5.0 | 24.5 | -0.21 | 0.00 | 0.00 |
| 77 | 5 | 17 | 21 | 8.4 | 333.3 | 10.1 | 295.0 | 12.0 | 337.4 | 4.9 | 5.2 | 4.7 | 24.5 | -0.24 | 0.00 | 0.00 |
| 77 | 5 | 17 | 22 | 13.3 | 332.4 | 16.1 | 292.6 | 18.4 | 333.0 | 4.0 | 4.3 | 3.7 | 24.8 | -0.29 | 0.00 | 0.00 |
| 77 | 5 | 17 | 23 | 13.7 | 334.3 | 16.4 | 295.0 | 18.7 | 335.0 | 2.5 | 2.8 | 2.2 | 27.9 | -0.32 | 0.00 | 0.00 |
| 77 | 5 | 17 | 24 | 13.8 | 314.1 | 17.0 | 273.8 | 20.1 | 315.6 | 1.3 | 1.6 | 1.1 | 32.8 | -0.20 | 0.00 | 0.00 |
| 77 | 5 | 18 | 1 | 9.8 | 314.7 | 12.4 | 273.9 | 14.4 | 317.5 | 0.6 | 1.1 | 0.9 | 36.3 | 0.31 | 0.00 | 0.00 |
| 77 | 5 | 18 | 2 | 10.4 | 307.6 | 13.0 | 270.9 | 14.9 | 312.3 | 0.0 | 0.6 | 0.5 | 44.7 | 0.42 | 0.00 | 0.00 |
| 77 | 5 | 18 | 3 | 12.1 | 294.1 | 13.4 | 254.4 | 11.1 | 284.1 | 0.3 | 1.8 | 2.1 | 44.8 | 1.77 | 0.00 | 0.00 |
| 77 | 5 | 18 | 4 | 8.1 | 312.4 | 9.5 | 277.4 | 9.6 | 310.9 | 0.1 | 0.9 | 0.9 | 46.1 | 0.74 | 0.00 | 0.00 |
| 77 | 5 | 18 | 5 | 3.9 | 229.5 | 5.4 | 192.6 | 6.9 | 232.6 | -0.0 | 0.5 | 0.4 | 45.2 | 0.49 | 0.00 | 0.02 |
| 77 | 5 | 18 | 6 | 10.0 | 239.5 | 13.8 | 205.8 | 17.6 | 249.8 | 2.0 | 2.3 | 1.8 | 28.3 | -0.23 | 0.00 | 0.19 |
| 77 | 5 | 18 | 7 | 14.4 | 236.1 | 18.8 | 198.7 | 22.0 | 241.9 | 3.8 | 3.6 | 3.1 | 24.1 | -0.71 | 0.00 | 0.49 |
| 77 | 5 | 18 | 8 | 16.6 | 232.9 | 21.5 | 196.3 | 23.9 | 239.5 | 4.8 | 4.3 | 4.0 | 23.4 | -0.83 | 0.00 | 0.79 |
| 77 | 5 | 18 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 18 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 18 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 18 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 18 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 18 | 14 | 14.4 | 217.1 | 17.2 | 202.5 | 19.2 | 220.4 | 7.5 | 6.9 | 6.5 | 22.1 | -1.00 | 3.04 | 0.92 |
| 77 | 5 | 18 | 15 | 14.6 | 214.3 | 18.3 | 203.5 | 21.2 | 220.7 | 7.3 | 6.8 | 6.3 | 22.1 | -1.00 | 0.00 | 0.80 |
| 77 | 5 | 18 | 16 | 12.3 | 205.1 | 15.4 | 196.9 | 17.6 | 216.2 | 6.5 | 6.3 | 5.8 | 22.4 | -0.71 | 0.00 | 0.36 |
| 77 | 5 | 18 | 17 | 13.9 | 262.0 | 16.5 | 248.8 | 18.7 | 261.9 | 6.1 | 6.0 | 5.4 | 22.6 | -0.73 | 0.00 | 0.31 |
| 77 | 5 | 18 | 18 | 17.5 | 316.3 | 20.3 | 302.0 | 21.9 | 313.3 | 4.3 | 4.2 | 3.6 | 23.4 | -0.71 | 0.00 | 0.27 |
| 77 | 5 | 18 | 19 | 16.1 | 298.5 | 19.7 | 285.9 | 22.7 | 298.3 | 1.9 | 2.2 | 1.7 | 25.0 | -0.21 | 0.00 | 0.03 |
| 77 | 5 | 18 | 20 | 11.0 | 278.8 | 14.4 | 269.2 | 17.9 | 282.6 | 1.2 | 1.7 | 1.4 | 25.5 | 0.22 | 0.00 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 18 | 21 | 8.9 | 261.8 | 11.1 | 260.0 | 13.4 | 279.4 | 1.2 | 1.6 | 1.2 | 25.7 | -0.02 | 0.00 | 0.00 |
| 77 | 5 | 18 | 22 | 6.3 | 180.2 | 6.8 | 163.6 | 6.5 | 173.7 | 0.8 | 1.2 | 0.9 | 26.2 | 0.11 | 0.00 | 0.00 |
| 77 | 5 | 18 | 23 | 6.6 | 229.8 | 6.7 | 206.2 | 6.8 | 211.4 | 0.6 | 1.1 | 0.8 | 26.3 | 0.21 | 0.00 | 0.00 |
| 77 | 5 | 18 | 24 | 7.6 | 271.1 | 7.4 | 262.4 | 7.4 | 281.3 | 1.3 | 1.8 | 1.5 | 26.1 | 0.20 | 0.00 | 0.00 |
| 77 | 5 | 19 | 1 | 7.7 | 283.1 | 7.9 | 278.9 | 8.0 | 295.0 | 1.2 | 1.7 | 1.2 | 26.3 | 0.04 | 0.00 | 0.00 |
| 77 | 5 | 19 | 2 | 4.8 | 241.1 | 6.2 | 260.4 | 7.5 | 284.6 | 0.0 | 0.7 | 0.7 | 28.1 | 0.67 | 0.00 | 0.00 |
| 77 | 5 | 19 | 3 | 6.9 | 224.0 | 7.3 | 222.6 | 8.1 | 260.2 | -0.2 | 0.3 | 0.2 | 28.6 | 0.39 | 0.00 | 0.00 |
| 77 | 5 | 19 | 4 | 5.2 | 204.9 | 6.0 | 195.7 | 5.9 | 216.0 | -0.9 | -0.1 | -0.3 | 30.3 | 0.62 | 0.00 | 0.00 |
| 77 | 5 | 19 | 5 | 5.5 | 229.4 | 6.3 | 205.3 | 6.6 | 208.3 | -0.3 | 0.4 | 0.2 | 29.5 | 0.46 | 0.00 | 0.03 |
| 77 | 5 | 19 | 6 | 3.8 | 235.3 | 4.4 | 227.6 | 4.9 | 242.4 | 1.1 | 1.7 | 0.9 | 26.7 | -0.17 | 0.00 | 0.21 |
| 77 | 5 | 19 | 7 | 8.0 | 266.7 | 8.8 | 252.5 | 9.7 | 262.9 | 2.7 | 2.7 | 1.9 | 24.9 | -0.74 | 0.00 | 0.50 |
| 77 | 5 | 19 | 8 | 8.1 | 279.7 | 8.7 | 264.4 | 9.0 | 271.4 | 3.5 | 3.5 | 2.7 | 24.1 | -0.81 | 0.00 | 0.79 |
| 77 | 5 | 19 | 9 | 9.0 | 261.0 | 9.8 | 246.9 | 10.6 | 255.9 | 4.8 | 4.6 | 3.9 | 23.3 | -0.92 | 0.00 | 1.08 |
| 77 | 5 | 19 | 10 | 7.8 | 246.1 | 8.9 | 231.8 | 9.8 | 248.1 | 5.9 | 5.7 | 4.9 | 22.6 | -0.97 | 0.00 | 0.94 |
| 77 | 5 | 19 | 11 | 10.7 | 277.0 | 12.0 | 263.2 | 13.1 | 274.7 | 6.7 | 6.3 | 5.7 | 22.4 | -0.96 | 0.00 | 0.90 |
| 77 | 5 | 19 | 12 | 9.9 | 274.1 | 10.8 | 261.3 | 11.8 | 272.5 | 7.4 | 7.2 | 6.5 | 22.1 | -0.88 | 0.00 | 0.92 |
| 77 | 5 | 19 | 13 | 9.3 | 290.6 | 10.0 | 274.7 | 10.8 | 280.8 | 8.3 | 8.1 | 7.4 | 21.6 | -0.91 | 0.00 | 1.05 |
| 77 | 5 | 19 | 14 | 9.4 | 270.3 | 10.3 | 257.8 | 10.9 | 266.9 | 9.1 | 8.7 | 8.1 | 21.2 | -0.96 | 0.00 | 1.06 |
| 77 | 5 | 19 | 15 | 9.1 | 279.3 | 9.9 | 262.2 | 10.8 | 265.8 | 9.3 | 9.1 | 8.6 | 21.0 | -0.78 | 0.00 | 0.91 |
| 77 | 5 | 19 | 16 | 12.1 | 281.8 | 13.4 | 268.2 | 14.3 | 277.6 | 9.5 | 9.1 | 8.5 | 21.1 | -1.04 | 0.00 | 0.74 |
| 77 | 5 | 19 | 17 | 13.3 | 292.4 | 15.3 | 279.8 | 16.3 | 291.9 | 7.8 | 7.6 | 7.0 | 22.4 | -0.79 | 0.00 | 0.32 |
| 77 | 5 | 19 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 19 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 19 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 19 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 19 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 19 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 19 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 20 | 8 | 8.3 | 37.8 | 9.0 | 26.7 | 9.0 | 45.1 | 3.4 | 3.5 | 2.6 | 26.1 | -0.82 | 0.00 | 0.55 |
| 77 | 5 | 20 | 9 | 8.1 | 68.2 | 8.9 | 56.2 | 9.8 | 69.1 | 4.3 | 4.4 | 3.5 | 24.3 | -0.68 | 0.00 | 0.97 |
| 77 | 5 | 20 | 10 | 8.9 | 61.4 | 9.9 | 46.9 | 10.5 | 61.3 | 5.4 | 5.4 | 4.5 | 23.0 | -0.89 | 0.00 | 1.21 |
| 77 | 5 | 20 | 11 | 8.5 | 47.6 | 9.2 | 33.1 | 9.5 | 44.9 | 6.3 | 6.4 | 5.5 | 22.3 | -0.81 | 0.00 | 0.75 |
| 77 | 5 | 20 | 12 | 6.9 | 61.3 | 7.6 | 43.8 | 7.9 | 52.2 | 6.4 | 6.4 | 5.8 | 22.6 | -0.62 | 0.02 | 0.68 |
| 77 | 5 | 20 | 13 | 8.3 | 136.8 | 8.7 | 122.8 | 9.1 | 133.1 | 6.8 | 6.8 | 6.1 | 22.3 | -0.76 | 0.04 | 0.64 |
| 77 | 5 | 20 | 14 | 5.6 | 85.4 | 6.0 | 73.0 | 6.7 | 89.0 | 7.8 | 8.0 | 7.2 | 21.4 | -0.59 | 0.04 | 0.45 |
| 77 | 5 | 20 | 15 | 7.4 | 73.0 | 8.1 | 419.8 | 8.6 | 67.8 | 8.0 | 8.0 | 7.3 | 21.7 | -0.67 | 0.04 | 0.44 |
| 77 | 5 | 20 | 16 | 9.8 | 340.3 | 10.7 | 324.2 | 10.8 | 331.7 | 8.4 | 8.5 | 7.7 | 21.4 | -0.68 | 0.04 | 0.52 |
| 77 | 5 | 20 | 17 | 13.1 | 368.5 | 14.4 | 355.4 | 14.9 | 366.9 | 7.8 | 7.8 | 7.1 | 22.2 | -0.68 | 0.04 | 0.40 |
| 77 | 5 | 20 | 18 | 12.0 | 352.5 | 13.5 | 339.7 | 14.7 | 351.6 | 7.7 | 7.8 | 7.2 | 22.3 | -0.49 | 0.04 | 0.16 |
| 77 | 5 | 20 | 19 | 13.2 | 327.3 | 15.6 | 314.2 | 17.3 | 326.7 | 7.0 | 7.4 | 6.9 | 22.6 | -0.16 | 0.04 | 0.05 |
| 77 | 5 | 20 | 20 | 9.4 | 327.8 | 11.5 | 319.1 | 13.0 | 336.2 | 5.5 | 6.3 | 5.9 | 23.7 | 0.34 | 0.04 | 0.00 |
| 77 | 5 | 20 | 21 | 9.4 | 328.9 | 11.3 | 322.1 | 13.3 | 342.4 | 5.2 | 5.8 | 5.7 | 24.0 | 0.47 | 0.04 | 0.00 |
| 77 | 5 | 20 | 22 | 10.2 | 319.6 | 11.9 | 318.8 | 13.1 | 340.4 | 4.8 | 5.8 | 5.5 | 24.2 | 0.64 | 0.04 | 0.00 |
| 77 | 5 | 20 | 23 | 9.3 | 317.9 | 11.3 | 317.4 | 12.9 | 340.5 | 3.9 | 5.3 | 5.3 | 24.7 | 1.41 | 0.04 | 0.00 |
| 77 | 5 | 20 | 24 | 9.6 | 329.0 | 11.8 | 322.8 | 14.3 | 341.6 | 3.7 | 4.7 | 4.6 | 23.9 | 0.83 | 0.04 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 5 | 21 | 1 | 7.5 | 342.6 | 9.0 | 338.6 | 11.6 | 357.1 | 3.1 | 3.9 | 3.9 | 24.2 | 0.75 | 0.04 | 0.00 |
| 77 | 5 | 21 | 2 | 7.0 | 350.1 | 9.1 | 354.2 | 11.2 | 10.0 | 2.7 | 3.7 | 3.6 | 24.5 | 0.83 | 0.04 | 0.00 |
| 77 | 5 | 21 | 3 | 4.8 | 306.4 | 5.3 | 327.5 | 6.9 | 364.8 | 2.5 | 2.9 | 3.0 | 25.0 | 0.57 | 0.04 | 0.00 |
| 77 | 5 | 21 | 4 | 3.7 | 302.6 | 3.5 | 307.5 | 4.0 | 339.7 | 2.9 | 2.8 | 2.9 | 24.9 | -0.00 | 0.04 | 0.00 |
| 77 | 5 | 21 | 5 | 2.7 | 240.3 | 2.6 | 290.9 | 2.2 | 357.7 | 2.4 | 2.2 | 2.6 | 25.4 | 0.19 | 0.04 | 0.03 |
| 77 | 5 | 21 | 6 | 4.6 | 207.8 | 5.0 | 202.5 | 5.4 | 211.3 | 2.9 | 3.4 | 2.7 | 24.3 | -0.18 | 0.04 | 0.20 |
| 77 | 5 | 21 | 7 | 3.5 | 142.1 | 3.8 | 129.5 | 3.9 | 139.6 | 4.2 | 5.0 | 3.6 | 22.6 | -0.55 | 0.04 | 0.48 |
| 77 | 5 | 21 | 8 | 5.9 | 363.1 | 6.3 | 351.5 | 6.5 | 365.8 | 5.5 | 6.1 | 4.9 | 22.6 | -0.62 | 0.04 | 0.46 |
| 77 | 5 | 21 | 9 | 9.0 | 354.0 | 9.9 | 340.1 | 10.3 | 349.8 | 6.3 | 6.3 | 5.6 | 22.8 | -0.69 | 0.04 | 0.71 |
| 77 | 5 | 21 | 10 | 9.2 | 339.4 | 9.9 | 326.1 | 10.3 | 335.0 | 7.6 | 7.3 | 6.5 | 22.0 | -1.07 | 0.04 | 1.05 |
| 77 | 5 | 21 | 11 | 10.8 | 323.6 | 11.9 | 308.9 | 12.3 | 320.0 | 8.3 | 7.9 | 7.2 | 21.7 | -1.05 | 0.04 | 1.08 |
| 77 | 5 | 21 | 12 | 10.5 | 339.2 | 11.4 | 323.0 | 12.1 | 332.4 | 9.1 | 8.6 | 8.1 | 21.3 | -1.03 | 0.04 | 1.33 |
| 77 | 5 | 21 | 13 | 8.9 | 323.3 | 9.5 | 306.4 | 10.6 | 318.6 | 10.0 | 9.6 | 9.0 | 20.8 | -1.01 | 0.04 | 1.17 |
| 77 | 5 | 21 | 14 | 10.0 | 325.4 | 11.0 | 307.2 | 11.9 | 319.2 | 10.8 | 10.2 | 9.7 | 20.5 | -1.11 | 0.04 | 1.17 |
| 77 | 5 | 21 | 15 | 10.2 | 310.5 | 11.2 | 297.2 | 12.0 | 311.0 | 11.5 | 11.0 | 10.4 | 20.2 | -1.10 | 0.04 | 1.08 |
| 77 | 5 | 21 | 16 | 10.6 | 321.9 | 11.9 | 305.8 | 13.0 | 317.6 | 11.9 | 11.6 | 10.9 | 20.3 | -0.92 | 0.04 | 0.75 |
| 77 | 5 | 21 | 17 | 8.9 | 324.5 | 9.9 | 309.4 | 10.5 | 318.8 | 12.0 | 11.9 | 11.2 | 20.2 | -0.83 | 0.04 | 0.52 |
| 77 | 5 | 21 | 18 | 8.2 | 318.0 | 9.1 | 302.6 | 9.8 | 314.4 | 11.9 | 12.2 | 11.3 | 20.2 | -0.61 | 0.04 | 0.29 |
| 77 | 5 | 21 | 19 | 6.5 | 283.1 | 7.3 | 275.6 | 7.8 | 290.8 | 11.2 | 11.8 | 11.0 | 20.7 | -0.20 | 0.04 | 0.05 |
| 77 | 5 | 21 | 20 | 9.5 | 263.9 | 9.5 | 253.8 | 9.6 | 268.0 | 10.5 | 11.2 | 10.8 | 21.3 | 0.34 | 0.04 | 0.00 |
| 77 | 5 | 21 | 21 | 7.6 | 249.8 | 6.9 | 230.5 | 6.4 | 243.3 | 10.7 | 11.1 | 10.7 | 21.1 | 0.02 | 0.04 | 0.00 |
| 77 | 5 | 21 | 22 | 5.9 | 261.2 | 5.5 | 259.9 | 5.3 | 283.2 | 10.5 | 11.0 | 10.8 | 21.2 | 0.27 | 0.04 | 0.00 |
| 77 | 5 | 21 | 23 | 5.2 | 279.5 | 4.9 | 282.1 | 4.7 | 303.5 | 10.6 | 11.0 | 10.8 | 21.3 | 0.22 | 0.04 | 0.00 |
| 77 | 5 | 21 | 24 | 6.8 | 286.8 | 6.6 | 282.9 | 6.4 | 304.8 | 10.8 | 11.0 | 10.7 | 21.2 | -0.04 | 0.04 | 0.00 |
| 77 | 5 | 22 | 1 | 7.7 | 281.9 | 7.1 | 280.4 | 6.7 | 304.5 | 10.2 | 10.7 | 10.5 | 21.3 | 0.24 | 0.04 | 0.00 |
| 77 | 5 | 22 | 2 | 10.4 | 268.4 | 11.7 | 259.8 | 11.4 | 273.1 | 9.2 | 10.4 | 10.1 | 21.7 | 0.93 | 0.04 | 0.00 |
| 77 | 5 | 22 | 3 | 4.5 | 199.8 | 4.9 | 180.4 | 6.1 | 204.9 | 7.0 | 7.6 | 8.1 | 22.5 | 1.06 | 0.04 | 0.00 |
| 77 | 5 | 22 | 4 | 5.4 | 225.8 | 5.8 | 198.0 | 6.0 | 191.0 | 7.4 | 7.8 | 7.8 | 22.6 | 0.46 | 0.04 | 0.00 |
| 77 | 5 | 22 | 5 | 5.9 | 243.8 | 5.6 | 216.8 | 5.4 | 209.8 | 8.4 | 8.8 | 8.6 | 22.1 | 0.26 | 0.04 | 0.03 |
| 77 | 5 | 22 | 6 | 3.2 | 205.7 | 3.8 | 196.1 | 4.2 | 195.2 | 9.1 | 9.6 | 9.0 | 21.3 | -0.14 | 0.04 | 0.19 |
| 77 | 5 | 22 | 7 | 4.3 | 357.4 | 4.3 | 342.3 | 4.3 | 187.7 | 10.1 | 11.0 | 9.7 | 20.4 | -0.34 | 0.04 | 0.48 |
| 77 | 5 | 22 | 8 | 5.9 | 174.5 | 7.0 | 168.4 | 8.2 | 197.9 | 11.7 | 12.1 | 10.9 | 19.9 | -0.87 | 0.04 | 0.73 |
| 77 | 5 | 22 | 9 | 9.6 | 237.3 | 11.4 | 221.1 | 12.6 | 235.3 | 12.7 | 12.4 | 11.8 | 20.0 | -0.97 | 0.04 | 0.80 |
| 77 | 5 | 22 | 10 | 10.4 | 252.2 | 12.1 | 237.6 | 12.7 | 250.0 | 13.8 | 13.3 | 12.7 | 19.6 | -1.08 | 0.04 | 1.20 |
| 77 | 5 | 22 | 11 | 11.2 | 285.3 | 12.6 | 269.9 | 13.6 | 279.7 | 14.1 | 13.5 | 13.1 | 19.4 | -1.07 | 0.04 | 1.27 |
| 77 | 5 | 22 | 12 | 9.8 | 285.4 | 10.8 | 272.4 | 11.4 | 283.9 | 14.7 | 14.2 | 13.8 | 19.1 | -0.97 | 0.04 | 1.39 |
| 77 | 5 | 22 | 13 | 8.6 | 270.0 | 9.6 | 258.3 | 10.3 | 268.2 | 15.5 | 15.0 | 14.4 | 18.5 | -1.06 | 0.04 | 1.35 |
| 77 | 5 | 22 | 14 | 10.7 | 254.3 | 12.0 | 236.2 | 12.6 | 248.4 | 16.4 | 15.8 | 15.4 | 18.4 | -0.95 | 0.04 | 1.09 |
| 77 | 5 | 22 | 15 | 8.2 | 237.5 | 9.5 | 223.1 | 11.0 | 237.4 | 16.1 | 15.9 | 15.1 | 18.6 | -0.93 | 0.04 | 0.47 |
| 77 | 5 | 22 | 16 | 8.9 | 223.9 | 11.0 | 209.8 | 12.7 | 230.5 | 16.5 | 16.3 | 15.7 | 18.6 | -0.82 | 0.04 | 0.54 |
| 77 | 5 | 22 | 17 | 9.2 | 213.0 | 11.6 | 201.0 | 13.8 | 221.1 | 16.2 | 16.1 | 15.5 | 18.7 | -0.72 | 0.04 | 0.34 |
| 77 | 5 | 22 | 18 | 9.5 | 205.7 | 12.6 | 194.6 | 14.2 | 209.8 | 15.9 | 16.0 | 15.4 | 19.0 | -0.43 | 0.04 | 0.17 |
| 77 | 5 | 22 | 19 | 7.9 | 218.0 | 10.9 | 201.6 | 13.8 | 213.0 | 14.9 | 15.3 | 15.0 | 19.4 | 0.08 | 0.04 | 0.04 |
| 77 | 5 | 22 | 20 | 5.6 | 256.5 | 8.4 | 220.7 | 13.7 | 217.4 | 13.5 | 14.0 | 14.5 | 20.1 | 1.04 | 0.04 | 0.00 |
| 77 | 5 | 22 | 21 | 6.2 | 258.1 | 9.4 | 219.3 | 13.5 | 212.1 | 12.7 | 13.5 | 14.3 | 20.4 | 1.52 | 0.04 | 0.00 |
| 77 | 5 | 22 | 22 | 6.2 | 242.9 | 10.1 | 213.2 | 14.9 | 213.7 | 13.0 | 13.7 | 14.1 | 20.2 | 1.03 | 0.04 | 0.00 |
| 77 | 5 | 22 | 23 | 8.4 | 216.3 | 12.2 | 201.4 | 15.1 | 209.5 | 13.3 | 13.9 | 13.8 | 20.1 | 0.51 | 0.04 | 0.00 |
| 77 | 5 | 22 | 24 | 5.5 | 248.9 | 7.8 | 220.8 | 12.9 | 223.5 | 13.1 | 13.5 | 13.6 | 20.2 | 0.54 | 0.04 | 0.00 |
| 77 | 5 | 23 | 1 | 8.5 | 212.4 | 12.9 | 197.5 | 16.0 | 208.0 | 13.2 | 13.9 | 13.7 | 20.1 | 0.50 | 0.04 | 0.00 |
| 77 | 5 | 23 | 2 | 7.9 | 221.8 | 12.0 | 206.3 | 15.4 | 213.6 | 12.6 | 13.3 | 13.3 | 20.3 | 0.61 | 0.04 | 0.00 |
| 77 | 5 | 23 | 3 | 6.8 | 230.6 | 10.9 | 207.6 | 15.5 | 213.1 | 12.0 | 12.7 | 12.9 | 20.6 | 0.95 | 0.04 | 0.00 |
| 77 | 5 | 23 | 4 | 6.2 | 239.8 | 10.4 | 214.4 | 16.9 | 218.8 | 11.8 | 12.5 | 12.8 | 20.7 | 1.00 | 0.04 | 0.00 |

RIO BLANCO OIL SHALF PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 23 | 5 | 9.0 | 228.5 | 12.7 | 215.4 | 20.2 | 222.4 | 11.8 | 12.4 | 12.5 | 20.7 | 0.73 | 0.04 | 0.02 |
| 77 | 5 | 23 | 6 | 8.8 | 202.5 | 12.0 | 192.1 | 14.5 | 206.5 | 12.0 | 12.5 | 12.2 | 20.3 | 0.25 | 0.04 | 0.21 |
| 77 | 5 | 23 | 7 | 9.9 | 185.7 | 12.5 | 176.2 | 13.1 | 193.8 | 14.0 | 14.1 | 13.5 | 19.4 | -0.52 | 0.04 | 0.50 |
| 77 | 5 | 23 | 8 | 14.8 | 187.7 | 18.7 | 176.8 | 19.2 | 192.3 | 15.4 | 14.9 | 14.6 | 19.0 | -0.86 | 0.04 | 0.76 |
| 77 | 5 | 23 | 9 | 14.5 | 198.1 | 18.1 | 186.5 | 19.4 | 203.4 | 15.9 | 15.4 | 15.0 | 18.9 | -0.88 | 0.04 | 0.66 |
| 77 | 5 | 23 | 10 | 17.5 | 198.7 | 22.3 | 188.1 | 23.6 | 204.3 | 15.8 | 15.2 | 15.0 | 19.0 | -0.82 | 0.04 | 0.87 |
| 77 | 5 | 23 | 11 | 17.0 | 207.5 | 21.2 | 196.8 | 24.1 | 216.4 | 16.8 | 16.0 | 15.9 | 18.5 | -0.99 | 0.04 | 1.08 |
| 77 | 5 | 23 | 12 | 13.4 | 225.3 | 16.4 | 211.2 | 19.2 | 231.0 | 17.4 | 16.9 | 16.4 | 18.3 | -1.00 | 0.04 | 0.82 |
| 77 | 5 | 23 | 13 | 12.3 | 217.0 | 15.3 | 203.8 | 17.3 | 223.5 | 17.5 | 17.0 | 16.5 | 18.2 | -0.96 | 0.04 | 0.73 |
| 77 | 5 | 23 | 14 | 15.9 | 211.1 | 20.3 | 199.3 | 23.0 | 217.0 | 18.4 | 17.9 | 17.6 | 17.9 | -0.89 | 0.04 | 0.81 |
| 77 | 5 | 23 | 15 | 18.2 | 209.5 | 23.9 | 197.9 | 26.9 | 213.9 | 18.6 | 18.2 | 18.0 | 18.0 | -0.54 | 0.04 | 0.54 |
| 77 | 5 | 23 | 16 | 11.3 | 231.4 | 13.8 | 215.9 | 17.9 | 232.9 | 17.8 | 17.7 | 17.2 | 18.2 | -0.67 | 0.04 | 0.35 |
| 77 | 5 | 23 | 17 | 8.9 | 211.8 | 11.4 | 201.9 | 13.5 | 220.3 | 17.5 | 17.5 | 17.0 | 18.4 | -0.54 | 0.04 | 0.23 |
| 77 | 5 | 23 | 18 | 5.6 | 211.7 | 7.4 | 202.3 | 9.3 | 218.3 | 17.2 | 17.3 | 17.0 | 18.4 | -0.23 | 0.04 | 0.13 |
| 77 | 5 | 23 | 19 | 5.5 | 249.2 | 7.5 | 216.9 | 10.9 | 219.8 | 16.2 | 16.7 | 16.9 | 19.0 | 0.67 | 0.04 | 0.03 |
| 77 | 5 | 23 | 20 | 5.6 | 244.4 | 8.8 | 215.6 | 13.3 | 216.8 | 15.4 | 16.2 | 16.8 | 19.4 | 1.34 | 0.04 | 0.00 |
| 77 | 5 | 23 | 21 | 5.2 | 263.4 | 7.6 | 221.1 | 14.0 | 223.7 | 15.1 | 15.7 | 16.2 | 19.5 | 1.06 | 0.04 | 0.00 |
| 77 | 5 | 23 | 22 | 5.9 | 253.2 | 8.6 | 220.6 | 14.6 | 227.1 | 14.9 | 15.3 | 15.6 | 19.6 | 0.72 | 0.04 | 0.00 |
| 77 | 5 | 23 | 23 | 6.1 | 246.4 | 8.7 | 221.7 | 15.5 | 228.2 | 13.3 | 13.8 | 14.1 | 20.2 | 0.77 | 0.04 | 0.00 |
| 77 | 5 | 23 | 24 | 6.8 | 250.2 | 8.3 | 219.3 | 10.4 | 219.3 | 12.7 | 13.6 | 13.8 | 20.4 | 1.03 | 0.04 | 0.00 |
| 77 | 5 | 24 | 1 | 5.3 | 242.5 | 7.7 | 210.0 | 11.4 | 205.0 | 10.5 | 11.3 | 12.0 | 21.3 | 1.44 | 0.04 | 0.00 |
| 77 | 5 | 24 | 2 | 5.6 | 250.9 | 8.3 | 213.3 | 13.4 | 209.5 | 10.8 | 11.6 | 12.4 | 21.2 | 1.64 | 0.04 | 0.00 |
| 77 | 5 | 24 | 3 | 5.4 | 219.5 | 8.7 | 200.0 | 11.6 | 203.1 | 10.5 | 11.3 | 11.5 | 21.3 | 0.94 | 0.04 | 0.00 |
| 77 | 5 | 24 | 4 | 7.2 | 224.1 | 11.9 | 201.0 | 14.6 | 206.1 | 10.3 | 11.4 | 11.7 | 21.3 | 1.40 | 0.04 | 0.00 |
| 77 | 5 | 24 | 5 | 3.8 | 220.8 | 7.2 | 205.7 | 12.7 | 203.9 | 8.8 | 9.9 | 11.1 | 21.9 | 2.34 | 0.04 | 0.04 |
| 77 | 5 | 24 | 6 | 3.6 | 180.1 | 6.0 | 172.7 | 8.3 | 183.9 | 10.7 | 11.6 | 11.3 | 20.6 | 0.60 | 0.04 | 0.23 |
| 77 | 5 | 24 | 7 | 7.4 | 215.0 | 8.8 | 203.0 | 9.9 | 223.8 | 13.0 | 13.1 | 12.3 | 19.8 | -0.62 | 0.04 | 0.46 |
| 77 | 5 | 24 | 8 | 10.2 | 230.3 | 12.1 | 214.4 | 13.8 | 229.7 | 13.5 | 13.3 | 12.6 | 19.8 | -0.89 | 0.04 | 0.59 |
| 77 | 5 | 24 | 9 | 12.8 | 215.3 | 16.5 | 202.8 | 19.3 | 225.1 | 13.6 | 13.3 | 12.8 | 19.9 | -0.82 | 0.04 | 0.60 |
| 77 | 5 | 24 | 10 | 14.6 | 212.6 | 18.8 | 200.5 | 21.7 | 219.0 | 14.7 | 14.1 | 13.7 | 19.4 | -0.99 | 0.04 | 0.64 |
| 77 | 5 | 24 | 11 | 18.1 | 199.3 | 23.8 | 187.5 | 25.5 | 204.0 | 15.0 | 14.4 | 14.2 | 19.3 | -0.81 | 0.04 | 0.71 |
| 77 | 5 | 24 | 12 | 17.7 | 209.4 | 22.4 | 197.4 | 25.3 | 216.8 | 15.2 | 14.4 | 14.2 | 19.2 | -0.96 | 0.04 | 0.95 |
| 77 | 5 | 24 | 13 | 18.4 | 207.1 | 23.5 | 194.1 | 25.8 | 212.8 | 15.3 | 14.7 | 14.5 | 19.1 | -0.78 | 0.04 | 0.69 |
| 77 | 5 | 24 | 14 | 19.7 | 203.5 | 26.3 | 191.1 | 28.5 | 208.1 | 14.8 | 14.2 | 14.2 | 19.4 | -0.57 | 0.04 | 0.55 |
| 77 | 5 | 24 | 15 | 15.6 | 212.2 | 20.0 | 200.0 | 23.7 | 217.1 | 13.7 | 13.5 | 13.0 | 19.8 | -0.72 | 0.04 | 0.41 |
| 77 | 5 | 24 | 16 | 11.2 | 212.5 | 14.2 | 202.2 | 16.6 | 220.4 | 13.1 | 13.0 | 12.4 | 20.0 | -0.70 | 0.04 | 0.25 |
| 77 | 5 | 24 | 17 | 7.5 | 216.0 | 9.1 | 208.3 | 10.7 | 228.7 | 12.4 | 12.5 | 11.8 | 20.2 | -0.60 | 0.04 | 0.15 |
| 77 | 5 | 24 | 18 | 9.5 | 215.7 | 11.9 | 203.1 | 13.6 | 223.6 | 11.3 | 11.4 | 10.8 | 20.8 | -0.56 | 0.04 | 0.10 |
| 77 | 5 | 24 | 19 | 6.3 | 232.8 | 8.0 | 217.4 | 10.6 | 234.1 | 9.9 | 10.0 | 9.4 | 21.6 | -0.48 | 0.04 | 0.02 |
| 77 | 5 | 24 | 20 | 10.5 | 204.5 | 14.5 | 191.1 | 16.0 | 206.1 | 8.4 | 8.6 | 8.0 | 23.1 | -0.39 | 0.04 | 0.01 |
| 77 | 5 | 24 | 21 | 15.4 | 196.7 | 20.6 | 184.0 | 22.0 | 198.0 | 7.6 | 7.8 | 7.2 | 24.7 | -0.36 | 0.04 | 0.00 |
| 77 | 5 | 24 | 22 | 11.9 | 195.6 | 16.2 | 182.7 | 17.2 | 197.4 | 6.8 | 7.1 | 6.5 | 28.5 | -0.37 | 0.04 | 0.00 |
| 77 | 5 | 24 | 23 | 8.4 | 195.6 | 11.4 | 183.4 | 12.8 | 198.8 | 6.6 | 6.8 | 6.3 | 31.1 | -0.37 | 0.04 | 0.01 |
| 77 | 5 | 24 | 24 | 11.2 | 211.6 | 15.2 | 198.6 | 18.0 | 214.2 | 7.0 | 7.2 | 6.6 | 26.5 | -0.40 | 0.04 | 0.01 |
| 77 | 5 | 25 | 1 | 8.4 | 235.4 | 10.9 | 218.6 | 14.7 | 232.4 | 6.3 | 6.5 | 5.9 | 26.9 | -0.42 | 0.04 | 0.01 |
| 77 | 5 | 25 | 2 | 5.8 | 241.4 | 7.2 | 228.0 | 9.5 | 242.2 | 5.8 | 6.0 | 5.4 | 28.4 | -0.39 | 0.04 | 0.01 |
| 77 | 5 | 25 | 3 | 5.6 | 245.7 | 7.0 | 229.8 | 8.8 | 240.5 | 5.5 | 5.7 | 5.1 | 28.9 | -0.42 | 0.04 | 0.01 |
| 77 | 5 | 25 | 4 | 4.4 | 235.4 | 5.5 | 221.3 | 7.5 | 231.3 | 4.4 | 4.6 | 4.0 | 43.5 | -0.41 | 0.04 | 0.00 |
| 77 | 5 | 25 | 5 | 7.2 | 208.7 | 10.1 | 193.8 | 11.9 | 206.0 | 3.3 | 3.7 | 3.1 | 58.8 | -0.20 | 0.04 | 0.02 |
| 77 | 5 | 25 | 6 | 6.5 | 235.0 | 8.2 | 213.2 | 11.3 | 219.8 | 3.5 | 3.8 | 3.2 | 56.4 | -0.32 | 0.04 | 0.11 |
| 77 | 5 | 25 | 7 | 6.7 | 211.3 | 8.4 | 200.1 | 9.4 | 217.0 | 4.8 | 4.8 | 4.0 | 47.5 | -0.78 | 0.04 | 0.29 |
| 77 | 5 | 25 | 8 | 8.6 | 240.0 | 9.8 | 224.5 | 10.9 | 240.5 | 5.0 | 5.0 | 4.2 | 45.5 | -0.81 | 0.04 | 0.41 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 5 | 25 | 9 | 11.0 | 261.0 | 12.5 | 243.3 | 14.1 | 250.7 | 4.7 | 4.5 | 3.9 | 52.8 | -0.79 | 0.04 | 0.68 |
| 77 | 5 | 25 | 10 | 12.8 | 215.7 | 15.4 | 205.3 | 17.2 | 225.5 | 7.5 | 6.9 | 6.3 | 31.5 | -1.23 | 0.04 | 1.19 |
| 77 | 5 | 25 | 11 | 12.5 | 226.8 | 15.5 | 214.2 | 18.2 | 230.3 | 7.5 | 7.0 | 6.5 | 30.5 | -1.05 | 0.04 | 0.78 |
| 77 | 5 | 25 | 12 | 13.5 | 227.2 | 16.4 | 214.9 | 19.8 | 232.4 | 8.0 | 7.4 | 6.9 | 29.9 | -1.14 | 0.04 | 1.06 |
| 77 | 5 | 25 | 13 | 16.1 | 210.3 | 20.1 | 200.7 | 22.9 | 222.5 | 10.1 | 9.2 | 8.9 | 22.2 | -1.16 | 0.04 | 1.30 |
| 77 | 5 | 25 | 14 | 14.9 | 213.5 | 18.5 | 203.6 | 21.7 | 224.2 | 10.4 | 9.8 | 9.4 | 21.5 | -1.07 | 0.04 | 0.82 |
| 77 | 5 | 25 | 15 | 13.0 | 221.1 | 15.8 | 208.3 | 19.0 | 228.7 | 11.0 | 10.5 | 10.0 | 21.2 | -0.98 | 0.04 | 0.62 |
| 77 | 5 | 25 | 16 | 13.6 | 209.3 | 17.4 | 199.7 | 19.9 | 217.2 | 11.2 | 10.9 | 10.4 | 20.9 | -0.85 | 0.04 | 0.55 |
| 77 | 5 | 25 | 17 | 12.0 | 218.8 | 15.0 | 206.0 | 17.9 | 225.8 | 11.5 | 11.4 | 10.9 | 20.7 | -0.66 | 0.04 | 0.40 |
| 77 | 5 | 25 | 18 | 12.2 | 289.3 | 14.3 | 275.6 | 16.3 | 289.6 | 9.1 | 9.1 | 8.5 | 22.9 | -0.56 | 0.04 | 0.14 |
| 77 | 5 | 25 | 19 | 9.4 | 305.2 | 11.1 | 294.0 | 12.5 | 306.8 | 7.1 | 7.5 | 6.9 | 25.9 | -0.18 | 0.04 | 0.04 |
| 77 | 5 | 25 | 20 | 8.3 | 307.6 | 9.7 | 299.8 | 10.6 | 316.7 | 6.3 | 6.8 | 6.6 | 27.1 | 0.39 | 0.04 | 0.00 |
| 77 | 5 | 25 | 21 | 9.5 | 292.8 | 10.8 | 289.9 | 11.6 | 312.2 | 6.2 | 6.8 | 6.6 | 26.3 | 0.38 | 0.04 | 0.00 |
| 77 | 5 | 25 | 22 | 10.8 | 287.5 | 13.6 | 280.1 | 15.4 | 297.6 | 5.6 | 6.1 | 5.7 | 28.6 | 0.15 | 0.04 | 0.00 |
| 77 | 5 | 25 | 23 | 10.4 | 271.8 | 12.9 | 264.2 | 16.3 | 282.1 | 4.9 | 5.3 | 4.8 | 36.3 | -0.10 | 0.04 | 0.00 |
| 77 | 5 | 25 | 24 | 3.2 | 258.3 | 3.5 | 251.1 | 3.7 | 268.4 | 4.6 | 4.6 | 4.7 | 41.8 | 0.09 | 0.04 | 0.00 |
| 77 | 5 | 26 | 1 | 4.4 | 225.4 | 5.2 | 202.1 | 5.0 | 219.6 | 4.3 | 4.9 | 4.9 | 41.1 | 0.59 | 0.04 | 0.00 |
| 77 | 5 | 26 | 2 | 4.0 | 251.9 | 4.4 | 220.3 | 4.4 | 185.8 | 4.3 | 4.8 | 4.8 | 39.7 | 0.53 | 0.04 | 0.00 |
| 77 | 5 | 26 | 3 | 2.9 | 320.0 | 2.5 | 350.3 | 2.0 | 361.3 | 4.7 | 4.8 | 4.7 | 38.4 | -0.02 | 0.04 | 0.00 |
| 77 | 5 | 26 | 4 | 3.8 | 285.5 | 4.3 | 257.9 | 4.7 | 207.9 | 4.9 | 4.9 | 4.8 | 36.7 | -0.11 | 0.04 | 0.00 |
| 77 | 5 | 26 | 5 | 4.0 | 242.8 | 5.6 | 213.7 | 7.5 | 219.5 | 4.6 | 5.0 | 4.7 | 38.1 | 0.07 | 0.04 | 0.02 |
| 77 | 5 | 26 | 6 | 2.4 | 85.6 | 2.3 | 151.4 | 3.3 | 198.3 | 4.3 | 4.6 | 4.3 | 38.1 | -0.00 | 0.04 | 0.13 |
| 77 | 5 | 26 | 7 | 6.6 | 174.7 | 8.3 | 166.3 | 9.5 | 190.4 | 4.7 | 5.0 | 4.2 | 36.7 | -0.51 | 0.04 | 0.13 |
| 77 | 5 | 26 | 8 | 5.5 | 226.4 | 6.5 | 215.8 | 8.5 | 234.5 | 3.7 | 3.9 | 3.2 | 53.8 | -0.55 | 0.04 | 0.29 |
| 77 | 5 | 26 | 9 | 7.6 | 192.1 | 9.0 | 184.3 | 9.9 | 201.9 | 5.5 | 5.6 | 4.9 | 37.2 | -0.66 | 0.04 | 0.44 |
| 77 | 5 | 26 | 10 | 9.1 | 228.6 | 11.1 | 216.3 | 12.1 | 233.0 | 4.9 | 4.8 | 4.1 | 48.1 | -0.84 | 0.04 | 0.56 |
| 77 | 5 | 26 | 11 | 8.6 | 256.4 | 9.5 | 238.1 | 10.7 | 248.3 | 6.6 | 6.5 | 5.7 | 31.5 | -0.82 | 0.04 | 0.63 |
| 77 | 5 | 26 | 12 | 10.7 | 233.5 | 12.7 | 216.9 | 14.2 | 232.7 | 9.6 | 9.1 | 8.5 | 22.9 | -1.15 | 0.04 | 1.12 |
| 77 | 5 | 26 | 13 | 13.4 | 301.0 | 14.6 | 284.6 | 15.8 | 293.2 | 8.5 | 7.9 | 7.3 | 24.4 | -1.13 | 0.04 | 1.14 |
| 77 | 5 | 26 | 14 | 11.6 | 274.0 | 12.7 | 259.1 | 13.9 | 267.6 | 9.1 | 8.8 | 8.1 | 22.4 | -0.95 | 0.04 | 0.82 |
| 77 | 5 | 26 | 15 | 15.9 | 296.3 | 16.3 | 281.8 | 20.0 | 292.6 | 8.6 | 8.1 | 7.6 | 23.7 | -0.95 | 0.04 | 0.64 |
| 77 | 5 | 26 | 16 | 12.6 | 306.4 | 14.2 | 291.4 | 14.9 | 301.5 | 8.9 | 8.5 | 7.9 | 23.4 | -1.06 | 0.04 | 0.87 |
| 77 | 5 | 26 | 17 | 11.8 | 292.7 | 13.3 | 277.8 | 14.4 | 288.9 | 9.4 | 9.2 | 8.6 | 22.1 | -0.77 | 0.04 | 0.41 |
| 77 | 5 | 26 | 18 | 15.8 | 312.4 | 18.3 | 297.4 | 19.9 | 309.3 | 7.7 | 7.8 | 7.2 | 24.4 | -0.56 | 0.04 | 0.12 |
| 77 | 5 | 26 | 19 | 14.5 | 302.4 | 17.4 | 289.8 | 19.6 | 304.2 | 6.0 | 6.3 | 5.9 | 31.4 | -0.16 | 0.04 | 0.05 |
| 77 | 5 | 26 | 20 | 11.7 | 287.1 | 14.9 | 278.8 | 17.2 | 297.5 | 6.2 | 7.0 | 6.8 | 26.6 | 0.55 | 0.04 | 0.00 |
| 77 | 5 | 26 | 21 | 11.9 | 294.7 | 15.8 | 284.6 | 17.9 | 304.3 | 6.1 | 6.8 | 6.8 | 26.0 | 0.71 | 0.04 | 0.00 |
| 77 | 5 | 26 | 22 | 5.6 | 209.2 | 6.8 | 192.8 | 7.1 | 198.1 | 5.5 | 6.0 | 5.8 | 27.6 | 0.22 | 0.04 | 0.00 |
| 77 | 5 | 26 | 23 | 4.7 | 213.4 | 5.4 | 187.0 | 6.1 | 185.7 | 5.4 | 5.8 | 5.7 | 27.9 | 0.26 | 0.04 | 0.00 |
| 77 | 5 | 26 | 24 | 6.0 | 258.9 | 7.0 | 246.2 | 8.2 | 263.1 | 5.6 | 6.0 | 5.7 | 28.3 | 0.10 | 0.04 | 0.00 |
| 77 | 5 | 27 | 1 | 4.6 | 192.3 | 5.7 | 187.9 | 6.2 | 216.4 | 4.8 | 5.2 | 5.1 | 33.4 | 0.26 | 0.04 | 0.00 |
| 77 | 5 | 27 | 2 | 6.1 | 224.4 | 7.4 | 202.5 | 7.7 | 203.3 | 5.0 | 5.5 | 5.5 | 31.3 | 0.49 | 0.04 | 0.00 |
| 77 | 5 | 27 | 3 | 5.2 | 267.5 | 5.8 | 233.1 | 7.4 | 210.3 | 5.7 | 6.1 | 6.0 | 27.8 | 0.38 | 0.04 | 0.00 |
| 77 | 5 | 27 | 4 | 3.8 | 304.0 | 3.6 | 300.0 | 3.6 | 162.6 | 5.8 | 5.7 | 5.8 | 27.2 | -0.01 | 0.04 | 0.01 |
| 77 | 5 | 27 | 5 | 6.1 | 249.1 | 7.8 | 235.4 | 10.3 | 250.2 | 5.5 | 6.0 | 5.8 | 30.1 | 0.30 | 0.04 | 0.02 |
| 77 | 5 | 27 | 6 | 6.6 | 270.1 | 7.9 | 253.0 | 9.5 | 259.0 | 6.8 | 7.1 | 6.5 | 27.1 | -0.26 | 0.04 | 0.20 |
| 77 | 5 | 27 | 7 | 8.8 | 261.5 | 9.8 | 240.6 | 10.9 | 252.8 | 7.7 | 7.7 | 7.1 | 23.9 | -0.66 | 0.04 | 0.40 |
| 77 | 5 | 27 | 8 | 8.8 | 261.2 | 9.6 | 247.1 | 10.5 | 260.8 | 7.8 | 7.7 | 7.0 | 24.2 | -0.84 | 0.04 | 0.70 |
| 77 | 5 | 27 | 9 | 7.7 | 263.9 | 8.6 | 248.2 | 9.5 | 256.0 | 8.8 | 8.7 | 8.0 | 22.9 | -0.85 | 0.04 | 0.89 |
| 77 | 5 | 27 | 10 | 11.5 | 242.6 | 13.2 | 231.9 | 15.6 | 248.1 | 7.5 | 7.3 | 6.9 | 28.1 | -0.64 | 0.05 | 0.32 |
| 77 | 5 | 27 | 11 | 10.6 | 200.7 | 13.5 | 191.7 | 14.4 | 213.8 | 6.0 | 5.5 | 5.3 | 46.4 | -0.66 | 0.08 | 0.95 |
| 77 | 5 | 27 | 12 | 12.9 | 257.2 | 14.8 | 243.0 | 16.8 | 257.8 | 7.3 | 6.7 | 6.6 | 39.2 | -0.76 | 0.11 | 0.64 |

RIO BLANCO OIL SHALF PROJECT

| YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 5 | 27 | 13 | 11.0 | 241.8 | 12.6 | 229.5 | 14.1 | 243.2 | 6.0 | 5.3 | 5.4 | 51.6 | -0.55 | 0.16 | 0.64 |
| 77 | 5 | 27 | 14 | 10.4 | 243.9 | 11.7 | 233.3 | 12.4 | 250.8 | 9.5 | 9.2 | 8.7 | 28.2 | -0.79 | 0.16 | 1.34 |
| 77 | 5 | 27 | 15 | 14.5 | 272.2 | 16.5 | 256.6 | 18.7 | 264.7 | 10.0 | 9.4 | 9.2 | 26.4 | -0.79 | 0.16 | 0.85 |
| 77 | 5 | 27 | 16 | 9.2 | 229.2 | 10.7 | 218.0 | 12.0 | 231.9 | 9.8 | 9.5 | 9.0 | 27.6 | -0.76 | 0.16 | 0.81 |
| 77 | 5 | 27 | 17 | 10.9 | 286.3 | 12.4 | 275.8 | 13.7 | 283.6 | 11.0 | 11.0 | 10.3 | 21.6 | -0.71 | 0.16 | 0.43 |
| 77 | 5 | 27 | 18 | 10.0 | 297.5 | 11.7 | 281.9 | 13.1 | 287.5 | 9.4 | 9.6 | 8.9 | 24.4 | -0.42 | 0.16 | 0.17 |
| 77 | 5 | 27 | 19 | 2.3 | 309.0 | 2.7 | 339.0 | 3.0 | 289.2 | 8.3 | 8.3 | 8.4 | 28.4 | 0.14 | 0.16 | 0.05 |
| 77 | 5 | 27 | 20 | 4.7 | 288.2 | 4.3 | 294.1 | 4.6 | 314.1 | 8.1 | 8.2 | 8.2 | 26.3 | 0.10 | 0.16 | 0.01 |
| 77 | 5 | 27 | 21 | 7.7 | 281.4 | 9.5 | 273.9 | 11.4 | 288.8 | 7.0 | 7.6 | 7.4 | 29.0 | 0.35 | 0.16 | 0.01 |
| 77 | 5 | 27 | 22 | 4.3 | 229.4 | 4.4 | 219.2 | 4.5 | 230.1 | 6.1 | 6.6 | 6.7 | 37.7 | 0.66 | 0.16 | 0.01 |
| 77 | 5 | 27 | 23 | 4.9 | 210.8 | 6.5 | 194.1 | 8.2 | 194.0 | 6.2 | 6.8 | 6.6 | 36.9 | 0.45 | 0.16 | 0.00 |
| 77 | 5 | 27 | 24 | 3.6 | 260.8 | 4.2 | 229.8 | 4.9 | 192.2 | 6.2 | 6.9 | 6.9 | 35.4 | 0.69 | 0.16 | 0.00 |
| 77 | 5 | 28 | 1 | 3.9 | 249.2 | 3.9 | 215.1 | 3.9 | 201.8 | 6.9 | 7.2 | 7.0 | 29.3 | 0.07 | 0.16 | 0.00 |
| 77 | 5 | 28 | 2 | 4.5 | 304.9 | 3.8 | 293.7 | 2.7 | 265.4 | 7.1 | 7.5 | 7.6 | 27.1 | 0.44 | 0.16 | 0.01 |
| 77 | 5 | 28 | 3 | 3.0 | 138.8 | 3.2 | 91.9 | 3.9 | 435.9 | 6.0 | 6.4 | 6.6 | 31.7 | 0.54 | 0.16 | 0.01 |
| 77 | 5 | 28 | 4 | 3.6 | 263.6 | 3.5 | 162.8 | 4.1 | 186.3 | 5.7 | 6.1 | 6.1 | 32.1 | 0.42 | 0.16 | 0.01 |
| 77 | 5 | 28 | 5 | 4.1 | 274.3 | 3.2 | 302.1 | 1.9 | 199.1 | 6.3 | 6.5 | 6.8 | 28.8 | 0.52 | 0.16 | 0.03 |
| 77 | 5 | 28 | 6 | 2.9 | 71.1 | 3.2 | 73.4 | 4.0 | 111.4 | 6.4 | 7.7 | 6.2 | 24.9 | -0.13 | 0.16 | 0.19 |
| 77 | 5 | 28 | 7 | 3.3 | 91.0 | 3.8 | 81.8 | 4.0 | 95.8 | 7.4 | 8.5 | 6.9 | 23.1 | -0.50 | 0.16 | 0.48 |
| 77 | 5 | 28 | 8 | 4.2 | 71.7 | 4.5 | 58.7 | 5.0 | 87.2 | 9.4 | 10.1 | 8.8 | 22.1 | -0.60 | 0.16 | 0.76 |
| 77 | 5 | 28 | 9 | 9.6 | 271.8 | 10.9 | 254.2 | 12.0 | 257.9 | 11.7 | 11.5 | 10.7 | 21.3 | -0.95 | 0.16 | 0.86 |
| 77 | 5 | 28 | 10 | 10.5 | 275.0 | 11.9 | 261.6 | 12.9 | 271.8 | 10.2 | 10.1 | 9.4 | 22.5 | -0.80 | 0.16 | 0.83 |
| 77 | 5 | 28 | 11 | 10.2 | 257.3 | 11.7 | 243.8 | 13.5 | 254.2 | 10.2 | 10.0 | 9.4 | 23.9 | -0.80 | 0.17 | 0.65 |
| 77 | 5 | 28 | 12 | 14.3 | 299.7 | 16.8 | 284.9 | 18.9 | 294.3 | 7.8 | 7.4 | 7.2 | 36.8 | -0.65 | 0.22 | 0.82 |
| 77 | 5 | 28 | 13 | 14.9 | 323.3 | 17.3 | 309.7 | 18.5 | 320.0 | 7.2 | 7.0 | 6.3 | 34.8 | -0.85 | 0.24 | 0.75 |
| 77 | 5 | 28 | 14 | 7.9 | 322.8 | 8.6 | 310.6 | 9.1 | 319.4 | 8.9 | 8.9 | 8.1 | 25.3 | -0.86 | 0.24 | 1.10 |
| 77 | 5 | 28 | 15 | 15.7 | 307.9 | 17.9 | 294.8 | 19.4 | 305.3 | 9.7 | 9.1 | 8.6 | 23.1 | -1.18 | 0.24 | 1.03 |
| 77 | 5 | 28 | 16 | 16.3 | 312.4 | 18.7 | 297.9 | 20.0 | 306.4 | 8.3 | 8.2 | 7.4 | 24.4 | -0.91 | 0.24 | 0.53 |
| 77 | 5 | 28 | 17 | 12.8 | 289.0 | 14.7 | 276.5 | 16.0 | 286.5 | 7.8 | 8.1 | 7.2 | 25.6 | -0.61 | 0.24 | 0.17 |
| 77 | 5 | 28 | 18 | 8.4 | 285.6 | 10.0 | 274.0 | 11.6 | 287.3 | 7.8 | 8.4 | 7.4 | 27.4 | -0.43 | 0.28 | 0.30 |
| 77 | 5 | 28 | 19 | 5.2 | 350.7 | 6.4 | 336.5 | 7.3 | 347.6 | 8.2 | 8.8 | 7.9 | 25.0 | -0.25 | 0.28 | 0.08 |
| 77 | 5 | 28 | 20 | 3.1 | 240.2 | 3.0 | 332.5 | 3.2 | 372.9 | 7.2 | 7.5 | 7.3 | 30.5 | 0.14 | 0.26 | 0.02 |
| 77 | 5 | 28 | 21 | 3.8 | 253.1 | 3.2 | 234.8 | 2.5 | 232.0 | 6.7 | 6.9 | 7.0 | 31.7 | 0.28 | 0.28 | 0.01 |
| 77 | 5 | 28 | 22 | 3.3 | 253.0 | 3.0 | 235.7 | 2.6 | 145.7 | 6.9 | 6.8 | 7.1 | 32.0 | 0.22 | 0.28 | 0.01 |
| 77 | 5 | 28 | 23 | 2.2 | 309.4 | 1.9 | 308.1 | 1.3 | 184.3 | 6.4 | 5.3 | 6.6 | 35.8 | 0.20 | 0.28 | 0.01 |
| 77 | 5 | 28 | 24 | 3.3 | 298.7 | 2.8 | 341.7 | 2.4 | 31.0 | 5.6 | 5.2 | 5.9 | 39.5 | 0.31 | 0.28 | 0.01 |
| 77 | 5 | 29 | 1 | 3.5 | 330.7 | 3.2 | 338.8 | 2.3 | 23.6 | 4.9 | 5.1 | 5.3 | 44.3 | 0.40 | 0.28 | 0.01 |
| 77 | 5 | 29 | 2 | 3.1 | 280.8 | 2.9 | 286.7 | 3.0 | 302.7 | 5.5 | 5.4 | 6.0 | 44.6 | 0.47 | 0.28 | 0.01 |
| 77 | 5 | 29 | 3 | 2.0 | 125.7 | 1.9 | 144.1 | 1.8 | 165.7 | 5.6 | 4.7 | 6.3 | 43.6 | 0.63 | 0.28 | 0.01 |
| 77 | 5 | 29 | 4 | 3.0 | 327.0 | 2.5 | 205.0 | 2.6 | 205.1 | 5.1 | 4.3 | 5.3 | 48.3 | 0.24 | 0.28 | 0.01 |
| 77 | 5 | 29 | 5 | 3.4 | 254.5 | 3.0 | 233.4 | 2.9 | 232.0 | 6.1 | 6.1 | 6.2 | 34.3 | 0.13 | 0.28 | 0.04 |
| 77 | 5 | 29 | 6 | 2.3 | 169.2 | 2.4 | 148.8 | 2.3 | 162.3 | 6.7 | 7.6 | 6.5 | 23.8 | -0.19 | 0.28 | 0.20 |
| 77 | 5 | 29 | 7 | 3.2 | 96.6 | 3.3 | 84.4 | 3.3 | 110.7 | 8.0 | 9.3 | 7.5 | 21.9 | -0.43 | 0.28 | 0.50 |
| 77 | 5 | 29 | 8 | 4.4 | 123.4 | 4.7 | 112.3 | 4.8 | 129.7 | 10.1 | 10.9 | 9.5 | 21.7 | -0.55 | 0.28 | 0.79 |
| 77 | 5 | 29 | 9 | 8.3 | 192.7 | 9.5 | 184.5 | 10.6 | 202.3 | 12.7 | 12.9 | 11.7 | 21.3 | -0.97 | 0.28 | 1.06 |
| 77 | 5 | 29 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 5 | 29 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 29 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 5 | 30 | 11 | 9.6 | 297.9 | 10.9 | 279.6 | 11.4 | 296.1 | 15.2 | 14.7 | 14.2 | 20.0 | -0.96 | 0.14 | 1.41 |
| 77 | 5 | 30 | 12 | 11.5 | 299.4 | 12.8 | 280.3 | 13.9 | 299.5 | 15.9 | 15.2 | 14.7 | 19.6 | -1.19 | 0.28 | 1.43 |
| 77 | 5 | 30 | 13 | 10.7 | 287.1 | 11.9 | 268.8 | 13.2 | 286.7 | 16.8 | 16.1 | 15.6 | 18.8 | -1.21 | 0.28 | 1.40 |
| 77 | 5 | 30 | 14 | 12.4 | 312.2 | 13.5 | 291.3 | 14.7 | 306.8 | 17.8 | 17.0 | 16.5 | 18.5 | -1.26 | 0.28 | 1.31 |
| 77 | 5 | 30 | 15 | 10.4 | 320.4 | 11.6 | 300.6 | 12.5 | 318.1 | 18.3 | 17.7 | 17.1 | 18.3 | -1.18 | 0.28 | 1.14 |
| 77 | 5 | 30 | 16 | 11.8 | 329.0 | 13.1 | 308.7 | 13.7 | 326.8 | 18.5 | 18.1 | 17.5 | 18.3 | -0.99 | 0.28 | 0.89 |
| 77 | 5 | 30 | 17 | 11.4 | 336.5 | 12.6 | 315.9 | 13.4 | 333.0 | 18.5 | 18.3 | 17.6 | 18.3 | -0.90 | 0.28 | 0.60 |
| 77 | 5 | 30 | 18 | 10.1 | 331.8 | 11.6 | 311.5 | 12.5 | 329.4 | 18.0 | 18.1 | 17.4 | 18.5 | -0.65 | 0.28 | 0.30 |
| 77 | 5 | 30 | 19 | 5.7 | 308.9 | 7.0 | 301.6 | 8.5 | 337.6 | 16.4 | 16.8 | 16.4 | 19.3 | -0.02 | 0.28 | 0.06 |
| 77 | 5 | 30 | 20 | 4.8 | 294.9 | 5.1 | 297.7 | 6.3 | 338.6 | 15.3 | 15.7 | 15.9 | 19.9 | 0.60 | 0.07 | 0.01 |
| 77 | 5 | 30 | 21 | 2.5 | 296.2 | 2.6 | 285.0 | 2.0 | 379.6 | 15.7 | 15.1 | 16.0 | 19.7 | 0.33 | 0.14 | 0.00 |
| 77 | 5 | 30 | 22 | 4.6 | 276.1 | 3.7 | 263.5 | 2.7 | 334.5 | 15.8 | 16.2 | 16.3 | 19.3 | 0.47 | 0.14 | 0.00 |
| 77 | 5 | 30 | 23 | 5.3 | 253.1 | 4.5 | 208.7 | 3.8 | 221.8 | 15.9 | 16.2 | 16.2 | 19.1 | 0.25 | 0.21 | 0.00 |
| 77 | 5 | 30 | 24 | 5.3 | 268.3 | 4.5 | 243.8 | 3.5 | 280.3 | 16.1 | 16.3 | 16.4 | 18.9 | 0.21 | 0.28 | 0.00 |
| 77 | 5 | 31 | 1 | 5.0 | 325.0 | 4.2 | 309.4 | 3.1 | 357.9 | 15.4 | 15.6 | 16.0 | 19.2 | 0.62 | 0.28 | 0.00 |
| 77 | 5 | 31 | 2 | 3.1 | 329.9 | 2.8 | 350.6 | 4.0 | 70.0 | 14.5 | 13.9 | 15.3 | 19.7 | 0.78 | 0.28 | 0.00 |
| 77 | 5 | 31 | 3 | 4.8 | 322.9 | 4.9 | 309.5 | 4.2 | 361.1 | 14.2 | 14.3 | 14.7 | 19.8 | 0.47 | 0.28 | 0.00 |
| 77 | 5 | 31 | 4 | 4.1 | 334.1 | 3.8 | 325.1 | 3.4 | 16.8 | 13.9 | 14.0 | 14.5 | 19.8 | 0.56 | 0.28 | 0.00 |
| 77 | 5 | 31 | 5 | 2.8 | 356.2 | 3.4 | 344.5 | 3.8 | 361.5 | 12.9 | 13.2 | 14.0 | 20.3 | 1.08 | 0.28 | 0.04 |
| 77 | 5 | 31 | 6 | 2.0 | 415.4 | 1.9 | 387.6 | 1.9 | 107.6 | 13.3 | 14.7 | 13.7 | 18.8 | 0.42 | 0.28 | 0.21 |
| 77 | 5 | 31 | 7 | 2.9 | 113.7 | 2.9 | 86.4 | 2.8 | 149.3 | 14.4 | 15.7 | 14.0 | 17.7 | -0.45 | 0.28 | 0.49 |
| 77 | 5 | 31 | 8 | 4.1 | 118.0 | 4.4 | 81.6 | 4.5 | 121.0 | 16.8 | 17.5 | 16.3 | 17.2 | -0.51 | 0.28 | 0.78 |
| 77 | 5 | 31 | 9 | 4.9 | 70.6 | 5.1 | 31.8 | 4.8 | 70.5 | 19.1 | 19.4 | 18.4 | 16.9 | -0.71 | 0.28 | 1.04 |
| 77 | 5 | 31 | 10 | 7.5 | 361.6 | 8.0 | 320.9 | 9.0 | 355.4 | 20.1 | 19.8 | 19.1 | 16.8 | -1.03 | 0.28 | 1.25 |
| 77 | 5 | 31 | 11 | 7.4 | 355.0 | 7.9 | 316.4 | 8.5 | 346.7 | 20.6 | 20.3 | 19.6 | 16.6 | -0.98 | 0.28 | 1.38 |
| 77 | 5 | 31 | 12 | 8.3 | 35.6 | 8.8 | 363.5 | 9.0 | 32.9 | 21.5 | 21.1 | 20.4 | 16.2 | -1.07 | 0.28 | 1.42 |
| 77 | 5 | 31 | 13 | 7.7 | 333.5 | 8.4 | 301.0 | 6.8 | 340.2 | 22.1 | 21.6 | 21.1 | 15.9 | -0.98 | 0.28 | 1.39 |
| 77 | 5 | 31 | 14 | 8.4 | 330.7 | 9.0 | 290.4 | 9.3 | 327.2 | 22.5 | 22.0 | 21.5 | 15.7 | -1.02 | 0.28 | 1.29 |
| 77 | 5 | 31 | 15 | 8.6 | 326.1 | 9.3 | 289.8 | 9.6 | 324.6 | 22.9 | 22.6 | 21.9 | 15.5 | -0.96 | 0.28 | 1.12 |
| 77 | 5 | 31 | 16 | 9.5 | 329.1 | 10.7 | 292.3 | 11.6 | 325.3 | 23.4 | 23.0 | 22.3 | 15.6 | -1.08 | 0.28 | 0.88 |
| 77 | 5 | 31 | 17 | 8.3 | 321.3 | 9.6 | 287.8 | 10.5 | 322.3 | 23.1 | 23.0 | 22.2 | 15.5 | -0.89 | 0.28 | 0.60 |
| 77 | 5 | 31 | 18 | 9.4 | 330.1 | 10.8 | 290.6 | 11.9 | 325.8 | 22.7 | 22.9 | 22.0 | 15.9 | -0.66 | 0.28 | 0.32 |
| 77 | 5 | 31 | 19 | 7.1 | 342.9 | 8.8 | 311.8 | 10.3 | 349.4 | 21.2 | 22.0 | 21.4 | 16.5 | 0.24 | 0.28 | 0.06 |
| 77 | 5 | 31 | 20 | 7.8 | 328.6 | 7.4 | 315.6 | 7.5 | 359.0 | 20.1 | 21.1 | 21.0 | 17.3 | 0.87 | 0.28 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL. | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 5 | 31 | 21 | 6.8 | 330.3 | 5.9 | 315.5 | 5.7 | 11.5 | 20.0 | 20.5 | 20.6 | 17.2 | 0.55 | 0.28 | 0.00 |
| 77 | 5 | 31 | 22 | 5.9 | 330.5 | 5.5 | 315.9 | 5.4 | 21.7 | 19.7 | 19.9 | 20.4 | 17.3 | 0.78 | 0.28 | 0.00 |
| 77 | 5 | 31 | 23 | 4.3 | 320.6 | 4.2 | 317.3 | 4.9 | 26.6 | 19.4 | 19.3 | 20.0 | 17.5 | 0.63 | 0.28 | 0.00 |
| 77 | 5 | 31 | 24 | 3.1 | 291.6 | 2.2 | 311.6 | 1.6 | 65.0 | 19.3 | 18.2 | 19.9 | 17.7 | 0.58 | 0.28 | 0.00 |
| 77 | 6 | 1 | 1 | 2.7 | 263.5 | 2.3 | 214.7 | 2.0 | 217.2 | 19.6 | 18.1 | 19.7 | 17.7 | 0.13 | 0.28 | 0.00 |
| 77 | 6 | 1 | 2 | 3.2 | 241.5 | 3.0 | 177.5 | 3.5 | 186.8 | 19.2 | 18.8 | 19.5 | 17.7 | 0.28 | 0.28 | 0.00 |
| 77 | 6 | 1 | 3 | 3.2 | 239.6 | 3.3 | 181.1 | 4.1 | 194.7 | 18.2 | 18.2 | 18.8 | 18.0 | 0.58 | 0.28 | 0.00 |
| 77 | 6 | 1 | 4 | 5.2 | 271.5 | 5.0 | 219.2 | 4.8 | 230.5 | 18.1 | 18.2 | 18.4 | 17.8 | 0.32 | 0.28 | 0.00 |
| 77 | 6 | 1 | 5 | 4.0 | 293.8 | 4.0 | 172.3 | 3.8 | 213.6 | 17.7 | 18.3 | 18.5 | 17.8 | 0.80 | 0.28 | 0.03 |
| 77 | 6 | 1 | 6 | 2.5 | 379.8 | 2.2 | 346.6 | 1.2 | 353.6 | 15.4 | 17.0 | 16.5 | 17.7 | 1.10 | 0.28 | 0.21 |
| 77 | 6 | 1 | 7 | 2.6 | 127.7 | 2.5 | 80.7 | 2.5 | 177.0 | 17.3 | 19.0 | 17.1 | 16.3 | -0.29 | 0.28 | 0.48 |
| 77 | 6 | 1 | 8 | 4.1 | 118.8 | 4.3 | 85.2 | 4.5 | 126.2 | 20.1 | 20.6 | 19.6 | 15.6 | -0.52 | 0.28 | 0.77 |
| 77 | 6 | 1 | 9 | 5.8 | 141.3 | 6.2 | 103.7 | 6.6 | 143.1 | 22.6 | 22.7 | 21.9 | 15.2 | -0.69 | 0.28 | 1.03 |
| 77 | 6 | 1 | 10 | 6.9 | 223.7 | 8.1 | 185.4 | 8.7 | 228.0 | 23.9 | 23.6 | 23.0 | 14.8 | -0.96 | 0.28 | 1.10 |
| 77 | 6 | 1 | 11 | 8.2 | 321.2 | 8.9 | 281.0 | 9.7 | 315.0 | 23.9 | 23.6 | 23.0 | 15.0 | -0.85 | 0.28 | 0.74 |
| 77 | 6 | 1 | 12 | 6.2 | 381.0 | 6.5 | 351.3 | 6.9 | 311.5 | 24.0 | 24.1 | 23.3 | 14.8 | -0.72 | 0.28 | 0.74 |
| 77 | 6 | 1 | 13 | 5.5 | 98.7 | 6.1 | 437.8 | 6.0 | 118.0 | 24.6 | 24.7 | 23.9 | 14.0 | -0.74 | 0.28 | 0.77 |
| 77 | 6 | 1 | 14 | 9.8 | 328.4 | 10.8 | 289.8 | 11.5 | 318.8 | 25.8 | 25.3 | 24.7 | 14.3 | -1.06 | 0.28 | 1.17 |
| 77 | 6 | 1 | 15 | 8.0 | 214.1 | 9.7 | 203.4 | 10.6 | 252.8 | 25.3 | 25.0 | 24.4 | 14.7 | -0.87 | 0.28 | 0.65 |
| 77 | 6 | 1 | 16 | 11.3 | 299.2 | 13.0 | 262.8 | 14.1 | 295.7 | 24.8 | 24.7 | 24.1 | 14.9 | -0.70 | 0.28 | 0.45 |
| 77 | 6 | 1 | 17 | 8.3 | 327.5 | 9.2 | 293.6 | 9.8 | 326.8 | 24.7 | 24.7 | 24.0 | 14.9 | -0.64 | 0.28 | 0.47 |
| 77 | 6 | 1 | 18 | 5.5 | 277.0 | 6.5 | 241.0 | 7.3 | 274.0 | 24.4 | 24.6 | 24.0 | 15.1 | -0.37 | 0.28 | 0.16 |
| 77 | 6 | 1 | 19 | 8.7 | 264.1 | 9.8 | 243.1 | 10.7 | 267.9 | 22.9 | 23.6 | 23.7 | 16.0 | 0.74 | 0.28 | 0.04 |
| 77 | 6 | 1 | 20 | 13.0 | 307.8 | 15.8 | 272.1 | 17.9 | 305.1 | 22.2 | 22.9 | 22.7 | 16.2 | 0.50 | 0.28 | 0.00 |
| 77 | 6 | 1 | 21 | 13.9 | 304.8 | 17.4 | 271.8 | 20.5 | 309.8 | 20.9 | 21.5 | 21.2 | 16.6 | 0.37 | 0.28 | 0.00 |
| 77 | 6 | 1 | 22 | 13.9 | 306.7 | 18.4 | 274.2 | 22.8 | 314.2 | 19.7 | 20.5 | 20.6 | 17.1 | 0.89 | 0.28 | 0.00 |
| 77 | 6 | 1 | 23 | 12.7 | 305.1 | 16.2 | 279.1 | 17.0 | 319.1 | 19.8 | 21.0 | 20.9 | 17.0 | 1.17 | 0.28 | 0.00 |
| 77 | 6 | 1 | 24 | 11.4 | 295.8 | 13.2 | 267.6 | 13.4 | 307.9 | 19.6 | 20.9 | 20.9 | 17.1 | 1.29 | 0.28 | 0.00 |
| 77 | 6 | 2 | 1 | 10.2 | 293.8 | 11.8 | 254.6 | 13.6 | 281.5 | 19.3 | 20.3 | 20.4 | 17.2 | 1.16 | 0.28 | 0.00 |
| 77 | 6 | 2 | 2 | 14.6 | 305.1 | 17.0 | 271.1 | 18.7 | 297.5 | 19.5 | 20.1 | 19.9 | 17.1 | 0.40 | 0.28 | 0.00 |
| 77 | 6 | 2 | 3 | 10.0 | 305.0 | 12.2 | 289.1 | 13.7 | 322.4 | 18.8 | 19.7 | 19.8 | 17.4 | 1.06 | 0.28 | 0.00 |
| 77 | 6 | 2 | 4 | 9.7 | 281.0 | 8.5 | 261.4 | 7.7 | 293.3 | 19.3 | 20.1 | 20.0 | 17.3 | 0.73 | 0.28 | 0.00 |
| 77 | 6 | 2 | 5 | 11.8 | 274.9 | 12.3 | 244.4 | 12.8 | 263.4 | 18.3 | 19.6 | 19.6 | 17.5 | 1.30 | 0.28 | 0.03 |
| 77 | 6 | 2 | 6 | 7.0 | 283.2 | 7.3 | 240.7 | 10.3 | 248.6 | 19.0 | 19.4 | 19.0 | 17.1 | -0.04 | 0.28 | 0.21 |
| 77 | 6 | 2 | 7 | 6.6 | 227.8 | 7.9 | 212.3 | 10.3 | 243.8 | 20.4 | 20.4 | 19.8 | 16.5 | -0.64 | 0.28 | 0.44 |
| 77 | 6 | 2 | 8 | 6.9 | 265.5 | 7.9 | 238.3 | 8.9 | 262.2 | 21.8 | 21.6 | 20.9 | 15.8 | -0.95 | 0.28 | 0.80 |
| 77 | 6 | 2 | 9 | 8.7 | 290.9 | 9.7 | 265.1 | 10.4 | 284.5 | 22.3 | 21.9 | 21.3 | 15.7 | -0.96 | 0.28 | 1.04 |
| 77 | 6 | 2 | 10 | 9.2 | 303.2 | 10.1 | 275.7 | 10.9 | 292.3 | 22.7 | 22.2 | 21.7 | 15.5 | -0.95 | 0.28 | 1.10 |
| 77 | 6 | 2 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 6 | 2 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 6 | 2 | 13 | 5.8 | 288.4 | 7.6 | 249.0 | 8.5 | 299.6 | 24.6 | 24.4 | 23.8 | 14.7 | -0.79 | 0.07 | 0.98 |
| 77 | 6 | 2 | 14 | 8.6 | 264.5 | 10.1 | 240.8 | 11.7 | 264.5 | 23.9 | 23.7 | 23.1 | 15.5 | -0.74 | 0.28 | 0.37 |
| 77 | 6 | 2 | 15 | 11.1 | 263.1 | 13.1 | 241.0 | 14.7 | 263.1 | 23.6 | 23.6 | 23.0 | 15.5 | -0.61 | 0.28 | 0.29 |
| 77 | 6 | 2 | 16 | 13.4 | 198.0 | 16.7 | 174.6 | 18.3 | 201.4 | 22.8 | 22.9 | 22.3 | 15.9 | -0.50 | 0.28 | 0.23 |
| 77 | 6 | 2 | 17 | 7.2 | 200.2 | 8.4 | 176.3 | 8.9 | 199.6 | 23.6 | 23.6 | 23.0 | 15.3 | -0.55 | 0.28 | 0.31 |
| 77 | 6 | 2 | 18 | 6.1 | 221.4 | 8.6 | 196.5 | 9.9 | 222.0 | 23.4 | 23.6 | 23.1 | 15.4 | -0.33 | 0.28 | 0.17 |
| 77 | 6 | 2 | 19 | 12.2 | 242.4 | 15.2 | 222.5 | 19.7 | 248.0 | 22.1 | 22.4 | 22.0 | 16.1 | -0.18 | 0.28 | 0.04 |
| 77 | 6 | 2 | 20 | 8.9 | 252.7 | 11.1 | 223.5 | 15.1 | 246.6 | 21.0 | 21.3 | 21.1 | 16.5 | 0.02 | 0.28 | 0.00 |
| 77 | 6 | 2 | 21 | 7.9 | 280.2 | 9.3 | 249.8 | 12.0 | 259.5 | 19.4 | 19.8 | 19.7 | 17.2 | 0.32 | 0.28 | 0.00 |
| 77 | 6 | 2 | 22 | 8.7 | 289.4 | 9.8 | 259.3 | 12.6 | 263.5 | 18.4 | 19.0 | 18.8 | 17.7 | 0.41 | 0.28 | 0.01 |
| 77 | 6 | 2 | 23 | 8.5 | 282.7 | 9.3 | 241.6 | 14.8 | 251.3 | 18.4 | 18.7 | 18.9 | 17.8 | 0.50 | 0.28 | 0.01 |
| 77 | 6 | 2 | 24 | 3.2 | 179.3 | 3.8 | 143.4 | 6.7 | 249.8 | 17.5 | 17.4 | 17.8 | 18.4 | 0.30 | 0.28 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 3 | 1 | 2.1 | 349.2 | 2.8 | 233.1 | 5.7 | 243.1 | 16.9 | 16.8 | 17.6 | 18.9 | 0.68 | 0.28 | 0.01 |
| 77 | 6 | 3 | 2 | 2.9 | 48.3 | 3.0 | 343.8 | 4.3 | 250.5 | 16.3 | 16.4 | 17.1 | 19.0 | 0.83 | 0.28 | 0.01 |
| 77 | 6 | 3 | 3 | 3.8 | 214.4 | 4.7 | 196.9 | 9.0 | 239.9 | 16.4 | 16.5 | 16.8 | 18.9 | 0.39 | 0.28 | 0.00 |
| 77 | 6 | 3 | 4 | 4.8 | 254.9 | 6.8 | 227.2 | 13.2 | 241.2 | 16.8 | 17.1 | 17.2 | 18.4 | 0.44 | 0.28 | 0.00 |
| 77 | 6 | 3 | 5 | 7.6 | 288.8 | 7.5 | 243.9 | 12.1 | 245.4 | 16.7 | 17.0 | 17.0 | 18.4 | 0.33 | 0.28 | 0.02 |
| 77 | 6 | 3 | 6 | 4.1 | 169.7 | 4.8 | 172.2 | 7.5 | 219.1 | 16.5 | 17.3 | 17.1 | 17.9 | 0.60 | 0.28 | 0.21 |
| 77 | 6 | 3 | 7 | 7.0 | 178.6 | 8.5 | 163.3 | 10.7 | 203.0 | 18.9 | 19.3 | 18.4 | 17.0 | -0.47 | 0.28 | 0.49 |
| 77 | 6 | 3 | 8 | 9.4 | 252.0 | 11.2 | 225.9 | 14.0 | 249.5 | 21.2 | 20.9 | 20.2 | 16.3 | -1.04 | 0.28 | 0.77 |
| 77 | 6 | 3 | 9 | 9.5 | 255.8 | 11.2 | 232.9 | 13.0 | 249.8 | 22.2 | 21.7 | 21.1 | 16.0 | -1.01 | 0.28 | 1.02 |
| 77 | 6 | 3 | 10 | 9.3 | 282.1 | 10.3 | 254.0 | 11.3 | 276.9 | 22.8 | 22.2 | 21.7 | 15.6 | -1.04 | 0.28 | 1.10 |
| 77 | 6 | 3 | 11 | 8.5 | 253.3 | 10.0 | 226.4 | 11.0 | 255.4 | 23.1 | 22.7 | 22.2 | 15.4 | -0.92 | 0.28 | 0.84 |
| 77 | 6 | 3 | 12 | 9.1 | 242.8 | 10.5 | 219.9 | 11.2 | 246.5 | 24.1 | 23.4 | 22.9 | 14.8 | -1.19 | 0.28 | 1.40 |
| 77 | 6 | 3 | 13 | 10.2 | 263.2 | 11.5 | 241.8 | 12.7 | 265.3 | 24.6 | 24.0 | 23.4 | 14.6 | -1.24 | 0.28 | 1.10 |
| 77 | 6 | 3 | 14 | 10.7 | 286.5 | 11.9 | 256.1 | 13.5 | 277.8 | 24.6 | 24.0 | 23.4 | 14.8 | -1.16 | 0.28 | 0.94 |
| 77 | 6 | 3 | 15 | 9.4 | 254.4 | 10.7 | 230.0 | 12.2 | 251.9 | 24.3 | 24.0 | 23.4 | 15.0 | -0.98 | 0.28 | 0.67 |
| 77 | 6 | 3 | 16 | 8.8 | 246.3 | 10.4 | 226.4 | 11.3 | 247.2 | 25.3 | 24.9 | 24.3 | 14.2 | -1.04 | 0.28 | 0.96 |
| 77 | 6 | 3 | 17 | 8.2 | 266.7 | 9.4 | 240.8 | 10.8 | 262.0 | 25.1 | 25.0 | 24.3 | 14.4 | -0.82 | 0.28 | 0.52 |
| 77 | 6 | 3 | 18 | 6.8 | 229.1 | 8.4 | 209.9 | 10.4 | 238.7 | 24.2 | 24.3 | 23.8 | 15.1 | -0.34 | 0.28 | 0.24 |
| 77 | 6 | 3 | 19 | 5.6 | 265.9 | 6.7 | 228.6 | 10.0 | 238.8 | 22.6 | 22.9 | 22.9 | 15.7 | 0.29 | 0.28 | 0.06 |
| 77 | 6 | 3 | 20 | 6.8 | 281.0 | 6.5 | 231.9 | 14.4 | 237.2 | 21.0 | 21.4 | 22.2 | 16.7 | 1.20 | 0.28 | 0.01 |
| 77 | 6 | 3 | 21 | 7.9 | 283.0 | 8.9 | 234.3 | 15.8 | 245.5 | 20.8 | 21.1 | 21.6 | 16.8 | 0.82 | 0.28 | 0.00 |
| 77 | 6 | 3 | 22 | 7.7 | 276.9 | 9.2 | 233.1 | 16.5 | 248.3 | 20.7 | 20.9 | 21.2 | 16.8 | 0.48 | 0.28 | 0.00 |
| 77 | 6 | 3 | 23 | 7.9 | 283.2 | 9.2 | 239.2 | 15.5 | 247.8 | 20.2 | 20.6 | 20.8 | 16.9 | 0.59 | 0.28 | 0.00 |
| 77 | 6 | 3 | 24 | 9.4 | 289.6 | 10.2 | 249.0 | 14.6 | 253.0 | 19.4 | 20.0 | 20.3 | 17.2 | 0.88 | 0.28 | 0.00 |
| 77 | 6 | 4 | 1 | 6.5 | 355.0 | 8.3 | 330.7 | 10.3 | 348.2 | 17.7 | 18.3 | 18.5 | 17.8 | 0.73 | 0.28 | 0.00 |
| 77 | 6 | 4 | 2 | 5.0 | 294.2 | 4.6 | 291.5 | 3.8 | 325.4 | 17.5 | 17.6 | 17.9 | 18.2 | 0.40 | 0.28 | 0.00 |
| 77 | 6 | 4 | 3 | 5.2 | 272.6 | 4.2 | 247.8 | 3.6 | 252.5 | 19.0 | 18.9 | 19.3 | 17.7 | 0.25 | 0.28 | 0.00 |
| 77 | 6 | 4 | 4 | 7.5 | 234.2 | 8.8 | 216.0 | 10.8 | 241.7 | 17.5 | 18.3 | 19.2 | 17.9 | 1.76 | 0.28 | 0.00 |
| 77 | 6 | 4 | 5 | 5.3 | 250.7 | 5.6 | 223.3 | 6.3 | 238.3 | 17.9 | 18.3 | 18.4 | 17.7 | 0.46 | 0.28 | 0.03 |
| 77 | 6 | 4 | 6 | 2.4 | 235.7 | 2.7 | 180.6 | 3.3 | 240.3 | 18.0 | 18.8 | 18.2 | 17.0 | 0.22 | 0.28 | 0.22 |
| 77 | 6 | 4 | 7 | 7.9 | 292.1 | 8.8 | 271.2 | 9.8 | 284.4 | 20.0 | 20.1 | 19.4 | 16.4 | -0.64 | 0.28 | 0.48 |
| 77 | 6 | 4 | 8 | 13.6 | 283.8 | 15.5 | 261.4 | 16.9 | 284.6 | 20.9 | 20.4 | 19.9 | 16.6 | -0.96 | 0.28 | 0.79 |
| 77 | 6 | 4 | 9 | 9.6 | 298.1 | 10.3 | 274.8 | 10.7 | 297.2 | 22.1 | 21.6 | 21.1 | 16.2 | -1.01 | 0.28 | 1.04 |
| 77 | 6 | 4 | 10 | 5.9 | 296.9 | 6.2 | 286.2 | 6.4 | 320.9 | 23.3 | 23.1 | 22.4 | 15.6 | -0.89 | 0.28 | 1.23 |
| 77 | 6 | 4 | 11 | 6.4 | 323.6 | 6.9 | 303.5 | 7.4 | 325.6 | 24.2 | 24.1 | 23.2 | 15.2 | -0.95 | 0.28 | 1.15 |
| 77 | 6 | 4 | 12 | 8.3 | 385.6 | 9.0 | 362.0 | 9.3 | 385.8 | 24.7 | 24.6 | 23.8 | 15.2 | -0.96 | 0.28 | 0.90 |
| 77 | 6 | 4 | 13 | 6.6 | 344.9 | 7.0 | 321.5 | 7.4 | 341.0 | 25.8 | 25.6 | 24.8 | 14.2 | -0.95 | 0.28 | 1.44 |
| 77 | 6 | 4 | 14 | 6.3 | 94.8 | 7.1 | 78.3 | 7.7 | 99.9 | 26.1 | 26.2 | 25.3 | 13.6 | -0.78 | 0.28 | 1.15 |
| 77 | 6 | 4 | 15 | 7.7 | 399.5 | 8.5 | 377.0 | 8.9 | 395.9 | 26.4 | 26.5 | 25.5 | 14.1 | -0.90 | 0.28 | 0.88 |
| 77 | 6 | 4 | 16 | 7.0 | 397.8 | 7.6 | 376.1 | 8.2 | 397.7 | 26.7 | 26.6 | 25.9 | 14.2 | -0.79 | 0.28 | 0.83 |
| 77 | 6 | 4 | 17 | 7.6 | 340.1 | 8.2 | 319.0 | 8.8 | 345.2 | 26.8 | 27.0 | 26.0 | 14.3 | -0.87 | 0.28 | 0.61 |
| 77 | 6 | 4 | 18 | 9.9 | 231.4 | 11.5 | 209.6 | 12.8 | 231.7 | 25.8 | 26.1 | 25.1 | 14.7 | -0.78 | 0.28 | 0.37 |
| 77 | 6 | 4 | 19 | 16.2 | 187.8 | 20.8 | 167.3 | 22.3 | 188.4 | 22.9 | 22.9 | 22.4 | 16.4 | -0.46 | 0.28 | 0.12 |
| 77 | 6 | 4 | 20 | 10.5 | 196.6 | 14.6 | 175.4 | 16.3 | 194.7 | 20.6 | 21.0 | 20.6 | 17.4 | 0.02 | 0.28 | 0.01 |
| 77 | 6 | 4 | 21 | 9.0 | 216.7 | 13.1 | 190.1 | 14.9 | 206.0 | 20.1 | 20.6 | 20.3 | 17.4 | 0.15 | 0.28 | 0.01 |
| 77 | 6 | 4 | 22 | 8.6 | 253.2 | 12.1 | 217.4 | 16.7 | 227.5 | 20.2 | 20.7 | 20.8 | 17.2 | 0.62 | 0.28 | 0.00 |
| 77 | 6 | 4 | 23 | 8.3 | 198.3 | 9.8 | 177.9 | 9.8 | 193.7 | 19.9 | 20.8 | 21.2 | 17.1 | 1.36 | 0.28 | 0.00 |
| 77 | 6 | 4 | 24 | 3.7 | 325.7 | 3.3 | 337.2 | 4.0 | 89.0 | 17.8 | 17.5 | 18.4 | 18.1 | 0.60 | 0.28 | 0.00 |
| 77 | 6 | 5 | 1 | 5.5 | 304.7 | 4.5 | 300.6 | 3.3 | 349.5 | 17.5 | 17.7 | 17.9 | 18.1 | 0.46 | 0.28 | 0.00 |
| 77 | 6 | 5 | 2 | 5.1 | 277.7 | 4.3 | 255.9 | 3.1 | 262.6 | 18.4 | 18.3 | 18.5 | 17.8 | 0.09 | 0.28 | 0.00 |
| 77 | 6 | 5 | 3 | 4.7 | 307.3 | 3.9 | 303.8 | 2.9 | 345.0 | 18.6 | 18.6 | 18.9 | 17.7 | 0.27 | 0.28 | 0.00 |
| 77 | 6 | 5 | 4 | 2.2 | 193.8 | 2.0 | 54.1 | 3.0 | 75.0 | 17.8 | 16.2 | 18.1 | 18.5 | 0.31 | 0.28 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 5 | 5 | 3.1 | 318.2 | 2.4 | 325.8 | 2.5 | 40.8 | 16.9 | 16.2 | 17.3 | 18.5 | 0.42 | 0.28 | 0.03 |
| 77 | 6 | 5 | 6 | 3.1 | 382.1 | 3.2 | 374.8 | 3.2 | 61.4 | 17.4 | 18.0 | 17.4 | 17.3 | -0.04 | 0.28 | 0.21 |
| 77 | 6 | 5 | 7 | 3.0 | 97.5 | 3.1 | 73.5 | 2.7 | 92.4 | 18.7 | 19.8 | 18.2 | 16.2 | -0.44 | 0.28 | 0.47 |
| 77 | 6 | 5 | 8 | 5.2 | 174.9 | 5.7 | 160.1 | 6.1 | 180.5 | 21.0 | 21.2 | 20.3 | 15.7 | -0.69 | 0.28 | 0.76 |
| 77 | 6 | 5 | 9 | 5.5 | 143.8 | 5.8 | 122.7 | 6.1 | 147.0 | 23.2 | 23.2 | 22.4 | 15.3 | -0.80 | 0.28 | 1.01 |
| 77 | 6 | 5 | 10 | 7.3 | 91.2 | 8.2 | 66.6 | 9.0 | 90.2 | 24.6 | 24.4 | 23.7 | 14.8 | -0.91 | 0.28 | 1.22 |
| 77 | 6 | 5 | 11 | 9.9 | 101.5 | 11.2 | 81.6 | 12.5 | 106.4 | 25.3 | 24.9 | 24.3 | 14.8 | -1.02 | 0.28 | 1.18 |
| 77 | 6 | 5 | 12 | 10.8 | 138.1 | 12.2 | 119.4 | 13.1 | 145.0 | 26.1 | 25.6 | 25.0 | 14.4 | -1.10 | 0.28 | 1.30 |
| 77 | 6 | 5 | 13 | 8.6 | 134.7 | 9.8 | 115.7 | 11.0 | 139.9 | 26.9 | 26.4 | 25.9 | 14.0 | -0.97 | 0.28 | 1.11 |
| 77 | 6 | 5 | 14 | 8.6 | 171.9 | 9.4 | 146.8 | 10.2 | 168.3 | 27.3 | 27.1 | 26.2 | 13.6 | -1.03 | 0.28 | 1.36 |
| 77 | 6 | 5 | 15 | 6.0 | 107.8 | 7.0 | 85.6 | 7.9 | 112.5 | 27.3 | 27.6 | 26.4 | 13.6 | -0.80 | 0.28 | 0.88 |
| 77 | 6 | 5 | 16 | 9.8 | 49.2 | 10.8 | 392.3 | 11.5 | 54.6 | 27.4 | 27.4 | 26.5 | 14.1 | -0.97 | 0.28 | 0.75 |
| 77 | 6 | 5 | 17 | 16.4 | 85.1 | 18.7 | 65.1 | 20.6 | 84.4 | 25.4 | 25.5 | 24.8 | 15.4 | -0.69 | 0.28 | 0.31 |
| 77 | 6 | 5 | 18 | 17.3 | 206.3 | 21.9 | 187.4 | 24.6 | 203.1 | 21.5 | 21.8 | 21.3 | 17.1 | -0.18 | 0.28 | 0.06 |
| 77 | 6 | 5 | 19 | 13.5 | 218.7 | 17.3 | 201.8 | 22.6 | 226.1 | 19.5 | 19.6 | 19.2 | 17.7 | -0.30 | 0.28 | 0.05 |
| 77 | 6 | 5 | 20 | 9.6 | 202.5 | 12.5 | 179.5 | 13.5 | 190.3 | 19.3 | 19.5 | 19.2 | 17.8 | -0.09 | 0.28 | 0.01 |
| 77 | 6 | 5 | 21 | 3.9 | 72.6 | 5.1 | 78.2 | 6.9 | 109.5 | 20.5 | 20.8 | 20.8 | 17.2 | 0.30 | 0.28 | 0.00 |
| 77 | 6 | 5 | 22 | 3.9 | 382.7 | 4.7 | 379.8 | 6.0 | 53.2 | 19.4 | 19.7 | 19.8 | 17.5 | 0.40 | 0.28 | 0.00 |
| 77 | 6 | 5 | 23 | 3.1 | 137.1 | 3.9 | 95.2 | 5.6 | 100.2 | 18.4 | 18.6 | 18.8 | 18.0 | 0.38 | 0.28 | 0.00 |
| 77 | 6 | 5 | 24 | 3.8 | 230.7 | 3.5 | 193.6 | 3.3 | 193.6 | 17.9 | 18.0 | 18.1 | 18.1 | 0.23 | 0.28 | 0.00 |
| 77 | 6 | 6 | 1 | 3.4 | 213.4 | 3.8 | 177.2 | 4.2 | 163.8 | 18.2 | 18.3 | 18.4 | 18.0 | 0.21 | 0.28 | 0.00 |
| 77 | 6 | 6 | 2 | 2.5 | 212.5 | 3.0 | 164.2 | 4.1 | 153.6 | 18.2 | 17.8 | 18.2 | 18.3 | 0.08 | 0.28 | 0.00 |
| 77 | 6 | 6 | 3 | 2.6 | 312.7 | 1.9 | 380.4 | 2.6 | 159.9 | 17.9 | 16.6 | 18.0 | 18.4 | 0.08 | 0.28 | 0.00 |
| 77 | 6 | 6 | 4 | 2.5 | 228.6 | 2.6 | 194.5 | 4.4 | 165.2 | 17.7 | 16.9 | 17.8 | 18.5 | 0.11 | 0.28 | 0.00 |
| 77 | 6 | 6 | 5 | 2.0 | 248.7 | 2.2 | 199.2 | 5.2 | 170.6 | 17.3 | 16.5 | 17.3 | 18.9 | 0.08 | 0.28 | 0.03 |
| 77 | 6 | 6 | 6 | 2.9 | 255.3 | 2.7 | 233.1 | 3.1 | 196.2 | 17.0 | 16.8 | 17.2 | 18.3 | 0.19 | 0.28 | 0.12 |
| 77 | 6 | 6 | 7 | 3.9 | 251.0 | 4.0 | 225.3 | 4.4 | 228.8 | 18.3 | 18.4 | 17.9 | 17.4 | -0.36 | 0.28 | 0.28 |
| 77 | 6 | 6 | 8 | 2.9 | 188.1 | 3.2 | 173.2 | 3.5 | 192.1 | 19.1 | 19.3 | 18.6 | 16.6 | -0.51 | 0.28 | 0.46 |
| 77 | 6 | 6 | 9 | 4.4 | 125.3 | 4.6 | 98.3 | 4.6 | 101.9 | 21.2 | 21.5 | 20.6 | 15.9 | -0.62 | 0.28 | 0.89 |
| 77 | 6 | 6 | 10 | 8.1 | 210.8 | 9.3 | 190.1 | 10.1 | 211.8 | 23.4 | 23.1 | 22.5 | 15.4 | -0.92 | 0.28 | 0.90 |
| 77 | 6 | 6 | 11 | 7.5 | 156.7 | 8.4 | 133.7 | 8.8 | 161.9 | 22.8 | 22.7 | 22.1 | 15.7 | -0.71 | 0.28 | 0.51 |
| 77 | 6 | 6 | 12 | 10.2 | 205.4 | 11.8 | 189.3 | 12.9 | 217.8 | 23.3 | 22.9 | 22.4 | 15.8 | -0.90 | 0.28 | 0.61 |
| 77 | 6 | 6 | 13 | 7.7 | 254.6 | 9.0 | 235.3 | 9.5 | 257.7 | 24.2 | 23.7 | 23.1 | 15.0 | -1.06 | 0.28 | 1.41 |
| 77 | 6 | 6 | 14 | 6.8 | 129.3 | 7.3 | 106.7 | 8.0 | 135.1 | 24.8 | 24.7 | 24.0 | 14.3 | -0.82 | 0.28 | 1.00 |
| 77 | 6 | 6 | 15 | 7.5 | 139.7 | 8.5 | 117.2 | 9.2 | 140.9 | 23.8 | 23.8 | 23.2 | 15.4 | -0.61 | 0.28 | 0.46 |
| 77 | 6 | 6 | 16 | 9.1 | 138.3 | 10.5 | 116.0 | 12.0 | 139.4 | 24.2 | 24.0 | 23.4 | 14.7 | -0.80 | 0.28 | 0.52 |
| 77 | 6 | 6 | 17 | 7.9 | 129.6 | 9.2 | 108.8 | 10.2 | 131.9 | 24.0 | 23.9 | 23.3 | 15.0 | -0.68 | 0.28 | 0.32 |
| 77 | 6 | 6 | 18 | 14.2 | 87.2 | 17.0 | 66.2 | 18.9 | 90.7 | 22.5 | 22.5 | 22.0 | 16.0 | -0.53 | 0.28 | 0.14 |
| 77 | 6 | 6 | 19 | 6.9 | 336.8 | 7.7 | 316.1 | 8.2 | 242.4 | 20.2 | 20.5 | 20.2 | 17.0 | 0.01 | 0.28 | 0.04 |
| 77 | 6 | 6 | 20 | 6.8 | 295.9 | 6.3 | 284.0 | 5.4 | 307.7 | 19.6 | 20.1 | 20.0 | 17.3 | 0.45 | 0.28 | 0.01 |
| 77 | 6 | 6 | 21 | 4.7 | 212.1 | 4.4 | 181.4 | 4.2 | 185.8 | 19.7 | 20.2 | 20.1 | 17.2 | 0.44 | 0.28 | 0.00 |
| 77 | 6 | 6 | 22 | 4.4 | 352.0 | 4.4 | 360.2 | 5.4 | 51.1 | 18.6 | 19.0 | 19.1 | 17.7 | 0.52 | 0.28 | 0.00 |
| 77 | 6 | 6 | 23 | 4.7 | 321.3 | 4.8 | 320.8 | 4.6 | 16.6 | 17.9 | 18.2 | 18.2 | 18.0 | 0.26 | 0.28 | 0.00 |
| 77 | 6 | 6 | 24 | 3.4 | 310.3 | 3.0 | 304.8 | 2.6 | 373.3 | 17.8 | 17.6 | 17.9 | 18.2 | 0.10 | 0.28 | 0.00 |
| 77 | 6 | 7 | 1 | 4.9 | 267.5 | 5.7 | 258.5 | 6.6 | 283.4 | 17.8 | 18.0 | 18.1 | 18.1 | 0.29 | 0.28 | 0.00 |
| 77 | 6 | 7 | 2 | 4.8 | 343.5 | 5.2 | 334.5 | 6.0 | 367.2 | 16.9 | 17.1 | 17.1 | 18.4 | 0.24 | 0.28 | 0.00 |
| 77 | 6 | 7 | 3 | 4.0 | 329.1 | 3.6 | 321.3 | 3.7 | 385.2 | 16.1 | 16.1 | 16.2 | 18.8 | 0.11 | 0.28 | 0.00 |
| 77 | 6 | 7 | 4 | 5.1 | 289.5 | 4.6 | 263.9 | 4.1 | 281.8 | 15.6 | 15.6 | 15.9 | 19.0 | 0.26 | 0.28 | 0.00 |
| 77 | 6 | 7 | 5 | 3.6 | 307.6 | 3.0 | 317.7 | 2.4 | 365.5 | 15.5 | 15.7 | 16.2 | 19.1 | 0.63 | 0.28 | 0.03 |
| 77 | 6 | 7 | 6 | 3.6 | 218.4 | 4.3 | 215.5 | 4.8 | 238.8 | 16.8 | 17.1 | 16.7 | 18.0 | -0.05 | 0.28 | 0.24 |
| 77 | 6 | 7 | 7 | 5.5 | 239.9 | 6.5 | 216.6 | 8.0 | 240.6 | 19.3 | 19.4 | 18.6 | 16.8 | -0.68 | 0.28 | 0.50 |
| 77 | 6 | 7 | 8 | 10.9 | 275.6 | 11.9 | 246.4 | 13.5 | 260.4 | 20.4 | 20.1 | 19.5 | 16.8 | -0.88 | 0.28 | 0.77 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 7 | 9 | 11.2 | 284.8 | 12.3 | 258.7 | 13.3 | 274.1 | 21.2 | 20.6 | 20.2 | 16.7 | -0.98 | 0.28 | 1.00 |
| 77 | 6 | 7 | 10 | 10.2 | 298.4 | 11.4 | 274.2 | 12.1 | 295.1 | 21.9 | 21.3 | 20.8 | 16.4 | -1.06 | 0.28 | 1.01 |
| 77 | 6 | 7 | 11 | 10.6 | 314.9 | 11.6 | 292.0 | 12.4 | 316.1 | 22.8 | 22.2 | 21.7 | 16.0 | -1.11 | 0.28 | 1.21 |
| 77 | 6 | 7 | 12 | 10.2 | 340.2 | 11.1 | 315.5 | 11.8 | 334.7 | 23.7 | 23.0 | 22.5 | 15.7 | -1.29 | 0.28 | 1.50 |
| 77 | 6 | 7 | 13 | 9.4 | 99.0 | 10.5 | 438.1 | 11.0 | 98.1 | 23.2 | 22.8 | 22.1 | 15.8 | -1.10 | 0.28 | 0.79 |
| 77 | 6 | 7 | 14 | 12.6 | 194.7 | 15.3 | 172.1 | 15.5 | 192.0 | 21.8 | 21.4 | 20.9 | 16.7 | -0.94 | 0.28 | 0.47 |
| 77 | 6 | 7 | 15 | 12.9 | 256.5 | 15.2 | 234.2 | 16.2 | 258.3 | 22.2 | 21.9 | 21.3 | 16.4 | -0.90 | 0.28 | 0.46 |
| 77 | 6 | 7 | 16 | 16.8 | 336.1 | 19.8 | 313.4 | 21.6 | 334.1 | 18.8 | 19.1 | 18.8 | 18.0 | -0.06 | 0.28 | 0.17 |
| 77 | 6 | 7 | 17 | 6.8 | 319.7 | 7.6 | 297.3 | 8.4 | 319.3 | 20.7 | 20.8 | 20.3 | 17.0 | -0.34 | 0.28 | 0.25 |
| 77 | 6 | 7 | 18 | 4.1 | 326.5 | 4.4 | 305.4 | 4.5 | 333.6 | 21.6 | 21.8 | 21.0 | 16.1 | -0.57 | 0.28 | 0.27 |
| 77 | 6 | 7 | 19 | 6.6 | 354.6 | 7.7 | 332.2 | 8.3 | 355.4 | 21.1 | 21.3 | 20.7 | 16.6 | -0.42 | 0.28 | 0.09 |
| 77 | 6 | 7 | 20 | 6.2 | 108.5 | 7.2 | 88.4 | 8.4 | 113.4 | 19.3 | 19.4 | 19.0 | 17.6 | -0.28 | 0.28 | 0.01 |
| 77 | 6 | 7 | 21 | 5.6 | 83.3 | 7.5 | 71.8 | 8.9 | 101.2 | 18.5 | 19.0 | 18.9 | 17.9 | 0.33 | 0.28 | 0.01 |
| 77 | 6 | 7 | 22 | 5.7 | 157.8 | 7.3 | 128.5 | 8.4 | 137.9 | 17.9 | 18.2 | 17.8 | 18.1 | -0.06 | 0.28 | 0.00 |
| 77 | 6 | 7 | 23 | 6.0 | 258.3 | 7.5 | 222.3 | 10.3 | 234.8 | 17.0 | 17.3 | 17.2 | 18.5 | 0.21 | 0.28 | 0.00 |
| 77 | 6 | 7 | 24 | 6.6 | 273.5 | 7.9 | 227.5 | 14.4 | 240.7 | 16.6 | 16.8 | 17.0 | 18.7 | 0.41 | 0.28 | 0.00 |
| 77 | 6 | 8 | 1 | 5.4 | 269.5 | 6.1 | 223.5 | 9.9 | 242.6 | 16.6 | 16.9 | 16.9 | 18.8 | 0.32 | 0.28 | 0.00 |
| 77 | 6 | 8 | 2 | 4.1 | 390.7 | 4.2 | 380.9 | 3.9 | 90.8 | 15.0 | 15.2 | 15.4 | 19.7 | 0.38 | 0.28 | 0.00 |
| 77 | 6 | 8 | 3 | 4.0 | 289.8 | 3.4 | 294.9 | 2.3 | 195.3 | 15.0 | 15.2 | 15.7 | 19.9 | 0.63 | 0.28 | 0.00 |
| 77 | 6 | 8 | 4 | 2.9 | 370.7 | 2.9 | 367.9 | 2.5 | 394.0 | 14.3 | 14.3 | 15.0 | 20.4 | 0.64 | 0.28 | 0.00 |
| 77 | 6 | 8 | 5 | 2.3 | 287.7 | 2.4 | 251.6 | 3.3 | 240.9 | 14.7 | 14.6 | 15.2 | 20.7 | 0.49 | 0.28 | 0.03 |
| 77 | 6 | 8 | 6 | 3.5 | 171.2 | 4.1 | 156.8 | 4.4 | 202.1 | 15.8 | 16.2 | 15.6 | 19.1 | -0.15 | 0.28 | 0.19 |
| 77 | 6 | 8 | 7 | 4.8 | 173.5 | 5.3 | 170.1 | 5.6 | 287.5 | 17.2 | 17.6 | 16.7 | 18.3 | -0.44 | 0.28 | 0.29 |
| 77 | 6 | 8 | 8 | 6.2 | 270.5 | 6.7 | 247.2 | 7.6 | 261.9 | 18.5 | 18.7 | 17.7 | 18.2 | -0.73 | 1.18 | 0.57 |
| 77 | 6 | 8 | 9 | 8.8 | 292.0 | 9.7 | 262.8 | 9.9 | 298.5 | 19.0 | 19.3 | 18.0 | 17.8 | -0.95 | 3.12 | 1.04 |
| 77 | 6 | 8 | 10 | 7.0 | 299.0 | 7.7 | 265.2 | 8.7 | 294.7 | 20.2 | 20.4 | 19.3 | 16.9 | -0.97 | 3.12 | 0.89 |
| 77 | 6 | 8 | 11 | 6.8 | 264.5 | 7.7 | 224.6 | 9.0 | 271.9 | 20.1 | 20.1 | 19.4 | 17.2 | -0.72 | 2.08 | 0.17 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 10 | 10 | 15.7 | 260.2 | 19.5 | 246.0 | 20.7 | 258.1 | 16.8 | 15.9 | 15.5 | 18.5 | -1.26 | 0.00 | 0.94 |
| 77 | 6 | 10 | 11 | 11.9 | 290.0 | 12.9 | 274.7 | 13.8 | 281.3 | 16.2 | 15.7 | 15.1 | 18.6 | -1.10 | 0.00 | 0.99 |
| 77 | 6 | 10 | 12 | 15.0 | 234.4 | 18.3 | 221.8 | 21.4 | 236.6 | 18.9 | 17.9 | 17.6 | 17.6 | -1.30 | 0.00 | 1.40 |
| 77 | 6 | 10 | 13 | 15.2 | 219.0 | 19.1 | 207.0 | 22.8 | 225.6 | 20.4 | 19.4 | 19.1 | 17.0 | -1.34 | 0.00 | 1.40 |
| 77 | 6 | 10 | 14 | 14.4 | 214.5 | 18.0 | 203.9 | 20.7 | 222.8 | 20.9 | 20.0 | 19.6 | 16.5 | -1.26 | 0.00 | 1.16 |
| 77 | 6 | 10 | 15 | 14.8 | 207.8 | 18.4 | 196.9 | 20.9 | 216.1 | 20.9 | 20.2 | 19.8 | 16.4 | -1.16 | 0.00 | 1.00 |
| 77 | 6 | 10 | 16 | 15.1 | 200.6 | 19.5 | 189.7 | 20.8 | 207.1 | 20.7 | 20.1 | 19.8 | 16.5 | -0.86 | 0.00 | 0.62 |
| 77 | 6 | 10 | 17 | 13.0 | 208.4 | 16.4 | 200.0 | 19.1 | 219.3 | 20.8 | 20.5 | 20.0 | 16.5 | -0.76 | 0.00 | 0.52 |
| 77 | 6 | 10 | 18 | 10.3 | 233.8 | 12.4 | 221.2 | 15.6 | 234.1 | 20.4 | 20.4 | 19.8 | 16.7 | -0.57 | 0.00 | 0.27 |
| 77 | 6 | 10 | 19 | 6.9 | 242.4 | 8.4 | 225.4 | 11.4 | 236.2 | 19.4 | 19.7 | 19.2 | 17.0 | -0.27 | 0.00 | 0.08 |
| 77 | 6 | 10 | 20 | 7.7 | 263.4 | 8.9 | 239.5 | 10.9 | 245.3 | 18.3 | 18.9 | 18.9 | 17.8 | 0.60 | 0.00 | 0.00 |
| 77 | 6 | 10 | 21 | 8.8 | 265.3 | 9.7 | 236.4 | 11.4 | 235.3 | 17.4 | 18.2 | 18.6 | 18.1 | 1.22 | 0.00 | 0.00 |
| 77 | 6 | 10 | 22 | 10.1 | 265.0 | 9.7 | 244.3 | 10.0 | 249.9 | 17.8 | 18.6 | 18.5 | 17.9 | 0.68 | 0.00 | 0.00 |
| 77 | 6 | 10 | 23 | 9.3 | 273.1 | 9.5 | 264.1 | 10.0 | 276.3 | 17.5 | 18.4 | 18.1 | 18.0 | 0.53 | 0.00 | 0.00 |
| 77 | 6 | 10 | 24 | 7.4 | 273.5 | 7.4 | 261.5 | 8.1 | 271.9 | 17.8 | 18.2 | 17.9 | 18.0 | 0.20 | 0.00 | 0.00 |
| 77 | 6 | 11 | 1 | 2.7 | 422.3 | 3.4 | 414.7 | 4.9 | 388.2 | 13.7 | 13.7 | 14.3 | 19.6 | 0.53 | 0.00 | 0.00 |
| 77 | 6 | 11 | 2 | 2.8 | 253.9 | 2.4 | 237.3 | 2.3 | 325.9 | 13.5 | 12.4 | 13.8 | 20.1 | 0.31 | 0.00 | 0.00 |
| 77 | 6 | 11 | 3 | 3.2 | 266.9 | 3.1 | 265.5 | 2.9 | 267.3 | 13.9 | 13.7 | 14.1 | 19.9 | 0.24 | 0.00 | 0.00 |
| 77 | 6 | 11 | 4 | 2.6 | 278.9 | 2.1 | 242.4 | 2.5 | 193.9 | 13.2 | 12.3 | 14.1 | 20.2 | 0.92 | 0.00 | 0.00 |
| 77 | 6 | 11 | 5 | 2.1 | 178.3 | 2.7 | 191.2 | 3.0 | 191.2 | 13.0 | 13.2 | 13.7 | 20.5 | 0.71 | 0.00 | 0.03 |
| 77 | 6 | 11 | 6 | 2.2 | 365.3 | 2.0 | 213.2 | 2.2 | 193.3 | 13.5 | 14.6 | 13.6 | 18.9 | 0.08 | 0.00 | 0.21 |
| 77 | 6 | 11 | 7 | 3.4 | 112.0 | 3.6 | 103.4 | 3.7 | 130.9 | 15.2 | 16.1 | 14.7 | 17.6 | -0.43 | 0.00 | 0.49 |
| 77 | 6 | 11 | 8 | 9.6 | 205.7 | 11.5 | 199.3 | 13.8 | 223.8 | 18.3 | 18.0 | 17.1 | 17.5 | -1.22 | 0.00 | 0.82 |
| 77 | 6 | 11 | 9 | 10.3 | 214.9 | 12.5 | 203.3 | 14.4 | 225.4 | 18.9 | 18.4 | 17.7 | 17.6 | -1.25 | 0.00 | 0.94 |
| 77 | 6 | 11 | 10 | 12.4 | 206.1 | 15.1 | 197.4 | 16.6 | 217.2 | 19.8 | 18.9 | 18.4 | 17.0 | -1.37 | 0.00 | 1.26 |
| 77 | 6 | 11 | 11 | 14.0 | 213.8 | 16.9 | 204.1 | 19.4 | 223.0 | 20.5 | 19.5 | 19.1 | 16.6 | -1.45 | 0.00 | 1.40 |
| 77 | 6 | 11 | 12 | 14.0 | 215.3 | 17.7 | 201.7 | 20.1 | 220.5 | 21.2 | 20.1 | 19.8 | 16.3 | -1.49 | 0.00 | 1.45 |
| 77 | 6 | 11 | 13 | 14.4 | 219.3 | 17.2 | 206.5 | 19.6 | 221.6 | 21.5 | 20.5 | 20.2 | 16.1 | -1.33 | 0.00 | 1.41 |
| 77 | 6 | 11 | 14 | 13.5 | 221.7 | 15.8 | 210.9 | 18.2 | 224.4 | 21.9 | 21.0 | 20.6 | 15.9 | -1.33 | 0.00 | 1.31 |
| 77 | 6 | 11 | 15 | 11.8 | 221.5 | 14.2 | 210.6 | 15.9 | 228.2 | 22.2 | 21.4 | 20.9 | 15.7 | -1.25 | 0.00 | 1.16 |
| 77 | 6 | 11 | 16 | 9.9 | 219.8 | 11.8 | 210.8 | 13.3 | 226.6 | 22.1 | 21.6 | 21.0 | 15.8 | -1.08 | 0.00 | 0.82 |
| 77 | 6 | 11 | 17 | 10.2 | 225.3 | 11.9 | 211.7 | 13.7 | 227.3 | 22.1 | 21.8 | 21.1 | 15.6 | -0.96 | 0.00 | 0.68 |
| 77 | 6 | 11 | 18 | 8.9 | 218.5 | 11.2 | 208.6 | 13.7 | 223.8 | 21.4 | 21.4 | 20.8 | 16.0 | -0.60 | 0.00 | 0.30 |
| 77 | 6 | 11 | 19 | 7.6 | 259.4 | 8.7 | 238.5 | 12.3 | 244.6 | 20.1 | 20.4 | 19.9 | 16.6 | -0.22 | 0.00 | 0.07 |
| 77 | 6 | 11 | 20 | 7.4 | 264.1 | 8.5 | 234.0 | 13.3 | 238.8 | 18.5 | 18.8 | 19.1 | 17.6 | 0.70 | 0.00 | 0.00 |
| 77 | 6 | 11 | 21 | 10.2 | 267.6 | 12.0 | 249.9 | 14.3 | 257.3 | 17.6 | 18.6 | 18.7 | 17.9 | 1.12 | 0.00 | 0.00 |
| 77 | 6 | 11 | 22 | 10.2 | 273.0 | 12.6 | 263.8 | 14.5 | 277.3 | 17.2 | 18.3 | 18.2 | 18.1 | 0.97 | 0.00 | 0.00 |
| 77 | 6 | 11 | 23 | 11.0 | 267.6 | 12.1 | 257.0 | 12.6 | 270.4 | 17.1 | 18.4 | 18.1 | 18.1 | 0.96 | 0.00 | 0.00 |
| 77 | 6 | 11 | 24 | 10.0 | 264.1 | 9.8 | 245.1 | 10.1 | 247.4 | 17.1 | 18.1 | 18.0 | 18.0 | 0.86 | 0.00 | 0.00 |
| 77 | 6 | 12 | 1 | 11.2 | 266.5 | 12.4 | 248.9 | 13.5 | 252.0 | 16.3 | 17.4 | 17.4 | 18.3 | 1.13 | 0.00 | 0.00 |
| 77 | 6 | 12 | 2 | 10.9 | 269.0 | 13.1 | 263.8 | 14.7 | 279.4 | 15.9 | 17.2 | 17.1 | 18.5 | 1.22 | 0.00 | 0.00 |
| 77 | 6 | 12 | 3 | 11.0 | 269.8 | 11.8 | 266.6 | 11.6 | 286.2 | 16.0 | 17.3 | 17.1 | 18.5 | 1.04 | 0.00 | 0.00 |
| 77 | 6 | 12 | 4 | 4.9 | 363.9 | 5.5 | 369.2 | 7.3 | 30.1 | 12.8 | 13.4 | 13.7 | 19.8 | 0.86 | 0.00 | 0.00 |
| 77 | 6 | 12 | 5 | 5.0 | 312.3 | 5.1 | 319.3 | 5.6 | 354.4 | 13.1 | 13.6 | 13.7 | 19.7 | 0.58 | 0.00 | 0.03 |
| 77 | 6 | 12 | 6 | 3.2 | 329.9 | 3.2 | 332.2 | 2.6 | 374.6 | 14.7 | 15.4 | 14.7 | 18.4 | 0.00 | 0.00 | 0.21 |
| 77 | 6 | 12 | 7 | 3.1 | 76.8 | 3.2 | 62.7 | 3.3 | 78.5 | 16.0 | 17.1 | 15.5 | 17.0 | -0.51 | 0.00 | 0.48 |
| 77 | 6 | 12 | 8 | 4.3 | 94.7 | 4.6 | 85.3 | 4.9 | 103.5 | 17.1 | 17.7 | 16.5 | 16.6 | -0.55 | 0.00 | 0.77 |
| 77 | 6 | 12 | 9 | 5.0 | 99.3 | 5.2 | 119.2 | 5.5 | 134.0 | 18.8 | 19.1 | 18.1 | 16.7 | -0.79 | 0.00 | 1.03 |
| 77 | 6 | 12 | 10 | 8.3 | 276.8 | 8.9 | 261.8 | 9.4 | 267.8 | 20.3 | 19.9 | 19.2 | 16.4 | -1.09 | 0.00 | 1.25 |
| 77 | 6 | 12 | 11 | 7.8 | 233.4 | 9.1 | 215.5 | 10.3 | 231.8 | 21.0 | 20.5 | 19.9 | 16.0 | -1.10 | 0.00 | 1.39 |
| 77 | 6 | 12 | 12 | 9.1 | 217.3 | 10.6 | 206.2 | 11.2 | 220.6 | 21.8 | 21.0 | 20.6 | 15.5 | -1.25 | 0.00 | 1.44 |
| 77 | 6 | 12 | 13 | 10.1 | 200.0 | 11.5 | 190.9 | 12.4 | 207.9 | 22.3 | 21.6 | 21.2 | 15.3 | -1.12 | 0.00 | 1.40 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 12 | 14 | 9.8 | 210.0 | 11.3 | 198.8 | 12.1 | 210.9 | 22.8 | 22.1 | 21.5 | 15.3 | -1.33 | 0.00 | 1.32 |
| 77 | 6 | 12 | 15 | 8.7 | 239.8 | 9.8 | 226.5 | 11.0 | 239.7 | 23.2 | 22.7 | 22.1 | 15.2 | -1.15 | 0.00 | 1.15 |
| 77 | 6 | 12 | 16 | 9.2 | 255.1 | 10.3 | 241.1 | 11.3 | 253.1 | 23.3 | 23.0 | 22.3 | 15.2 | -1.03 | 0.00 | 0.92 |
| 77 | 6 | 12 | 17 | 10.2 | 206.4 | 12.4 | 194.4 | 13.9 | 209.6 | 23.2 | 23.0 | 22.4 | 15.3 | -0.82 | 0.00 | 0.59 |
| 77 | 6 | 12 | 18 | 8.8 | 217.7 | 11.0 | 204.6 | 12.9 | 221.7 | 22.8 | 22.9 | 22.3 | 15.5 | -0.54 | 0.00 | 0.32 |
| 77 | 6 | 12 | 19 | 5.4 | 237.7 | 7.6 | 218.9 | 13.1 | 229.4 | 21.0 | 21.3 | 21.1 | 16.6 | 0.11 | 0.00 | 0.04 |
| 77 | 6 | 12 | 20 | 7.0 | 269.9 | 8.0 | 231.6 | 14.3 | 226.5 | 19.4 | 19.8 | 20.5 | 17.3 | 1.11 | 0.00 | 0.00 |
| 77 | 6 | 12 | 21 | 10.2 | 280.3 | 11.7 | 259.9 | 14.2 | 262.3 | 18.8 | 19.7 | 20.0 | 17.5 | 1.21 | 0.00 | 0.00 |
| 77 | 6 | 12 | 22 | 10.4 | 269.7 | 12.4 | 260.4 | 13.7 | 274.8 | 19.3 | 20.7 | 20.6 | 17.2 | 1.25 | 0.00 | 0.00 |
| 77 | 6 | 12 | 23 | 10.6 | 268.3 | 11.1 | 256.3 | 11.8 | 269.8 | 19.6 | 20.6 | 20.3 | 17.1 | 0.67 | 0.00 | 0.00 |
| 77 | 6 | 12 | 24 | 10.2 | 268.3 | 10.0 | 254.8 | 10.2 | 267.0 | 20.0 | 20.5 | 20.3 | 17.0 | 0.25 | 0.00 | 0.00 |
| 77 | 6 | 13 | 1 | 10.5 | 268.0 | 10.0 | 245.6 | 10.9 | 252.5 | 19.1 | 20.1 | 20.0 | 17.2 | 0.95 | 0.00 | 0.00 |
| 77 | 6 | 13 | 2 | 11.3 | 266.9 | 10.8 | 244.3 | 11.6 | 252.3 | 18.8 | 19.9 | 19.9 | 17.4 | 1.06 | 0.00 | 0.00 |
| 77 | 6 | 13 | 3 | 9.5 | 272.9 | 9.9 | 262.4 | 10.1 | 277.1 | 18.8 | 19.7 | 19.4 | 17.4 | 0.55 | 0.00 | 0.00 |
| 77 | 6 | 13 | 4 | 7.2 | 219.8 | 8.6 | 252.8 | 10.0 | 279.1 | 16.9 | 18.5 | 18.8 | 18.0 | 1.83 | 0.00 | 0.00 |
| 77 | 6 | 13 | 5 | 3.5 | 200.3 | 4.1 | 152.9 | 5.5 | 168.6 | 14.8 | 15.5 | 16.2 | 19.3 | 1.39 | 0.00 | 0.03 |
| 77 | 6 | 13 | 6 | 2.9 | 230.9 | 2.6 | 196.0 | 3.0 | 197.0 | 15.8 | 16.7 | 16.1 | 18.1 | 0.29 | 0.00 | 0.21 |
| 77 | 6 | 13 | 7 | 3.0 | 171.6 | 3.0 | 144.9 | 3.1 | 164.0 | 18.1 | 18.9 | 17.6 | 16.2 | -0.49 | 0.00 | 0.48 |
| 77 | 6 | 13 | 8 | 4.5 | 131.0 | 5.2 | 104.7 | 5.6 | 135.9 | 19.9 | 20.4 | 19.3 | 15.7 | -0.63 | 0.00 | 0.77 |
| 77 | 6 | 13 | 9 | 10.2 | 230.4 | 12.3 | 204.8 | 14.4 | 232.2 | 22.2 | 21.7 | 21.0 | 15.9 | -1.24 | 0.00 | 1.04 |
| 77 | 6 | 13 | 10 | 11.6 | 243.3 | 13.7 | 219.7 | 16.5 | 246.8 | 23.1 | 22.3 | 21.7 | 15.6 | -1.42 | 0.00 | 1.25 |
| 77 | 6 | 13 | 11 | 11.5 | 239.2 | 13.2 | 217.6 | 15.7 | 239.0 | 23.6 | 22.8 | 22.2 | 15.3 | -1.39 | 0.00 | 1.39 |
| 77 | 6 | 13 | 12 | 11.1 | 226.9 | 13.3 | 208.3 | 15.0 | 229.7 | 24.0 | 23.0 | 22.5 | 15.1 | -1.46 | 0.00 | 1.44 |
| 77 | 6 | 13 | 13 | 10.5 | 238.7 | 12.1 | 216.2 | 13.9 | 234.7 | 24.5 | 23.8 | 23.2 | 14.9 | -1.31 | 0.00 | 1.42 |
| 77 | 6 | 13 | 14 | 10.3 | 226.8 | 12.4 | 206.1 | 13.7 | 228.6 | 24.9 | 24.1 | 23.5 | 14.8 | -1.47 | 0.00 | 1.34 |
| 77 | 6 | 13 | 15 | 12.9 | 228.6 | 15.2 | 210.4 | 17.6 | 233.7 | 25.3 | 24.5 | 24.1 | 14.8 | -1.24 | 0.00 | 1.12 |
| 77 | 6 | 13 | 16 | 13.3 | 222.7 | 16.5 | 206.5 | 19.6 | 232.7 | 25.5 | 24.8 | 24.4 | 14.9 | -1.13 | 0.00 | 0.92 |
| 77 | 6 | 13 | 17 | 12.8 | 224.1 | 16.4 | 202.9 | 18.8 | 227.6 | 25.1 | 24.7 | 24.2 | 15.0 | -0.92 | 0.00 | 0.68 |
| 77 | 6 | 13 | 18 | 10.7 | 215.7 | 14.0 | 197.3 | 15.4 | 220.3 | 24.5 | 24.4 | 23.9 | 15.0 | -0.61 | 0.00 | 0.41 |
| 77 | 6 | 13 | 19 | 6.1 | 239.8 | 8.3 | 212.3 | 11.3 | 223.5 | 22.7 | 23.0 | 22.8 | 15.9 | 0.12 | 0.00 | 0.05 |
| 77 | 6 | 13 | 20 | 8.2 | 272.7 | 9.8 | 238.0 | 13.6 | 248.1 | 21.3 | 21.8 | 22.3 | 16.5 | 0.91 | 0.00 | 0.01 |
| 77 | 6 | 13 | 21 | 8.6 | 276.1 | 9.7 | 237.9 | 13.8 | 243.1 | 20.1 | 20.8 | 21.6 | 17.0 | 1.47 | 0.00 | 0.00 |
| 77 | 6 | 13 | 22 | 9.1 | 267.6 | 11.1 | 232.9 | 13.3 | 246.1 | 20.1 | 21.2 | 21.4 | 17.0 | 1.30 | 0.00 | 0.00 |
| 77 | 6 | 13 | 23 | 10.3 | 277.8 | 11.8 | 240.7 | 15.0 | 245.4 | 19.0 | 19.9 | 20.5 | 17.5 | 1.49 | 0.00 | 0.00 |
| 77 | 6 | 13 | 24 | 8.3 | 281.9 | 9.3 | 238.3 | 15.2 | 243.4 | 18.2 | 18.8 | 19.5 | 17.9 | 1.36 | 0.00 | 0.00 |
| 77 | 6 | 14 | 1 | 8.4 | 280.8 | 8.2 | 237.1 | 14.8 | 246.0 | 17.7 | 18.2 | 18.7 | 18.1 | 1.03 | 0.00 | 0.00 |
| 77 | 6 | 14 | 2 | 6.5 | 263.4 | 8.0 | 229.0 | 15.3 | 244.0 | 17.3 | 17.9 | 18.4 | 18.3 | 1.03 | 0.00 | 0.00 |
| 77 | 6 | 14 | 3 | 4.9 | 248.1 | 6.7 | 229.0 | 13.2 | 245.2 | 17.5 | 17.7 | 17.9 | 18.3 | 0.43 | 0.00 | 0.00 |
| 77 | 6 | 14 | 4 | 3.9 | 261.6 | 5.4 | 234.2 | 10.5 | 241.5 | 16.9 | 17.1 | 17.5 | 18.7 | 0.63 | 0.00 | 0.00 |
| 77 | 6 | 14 | 5 | 5.6 | 286.0 | 6.8 | 247.4 | 12.0 | 242.9 | 16.4 | 17.1 | 17.3 | 18.7 | 0.95 | 0.00 | 0.03 |
| 77 | 6 | 14 | 6 | 3.0 | 219.7 | 3.9 | 206.0 | 6.9 | 231.5 | 18.0 | 18.5 | 18.0 | 17.2 | -0.05 | 0.00 | 0.22 |
| 77 | 6 | 14 | 7 | 6.4 | 181.0 | 7.7 | 172.8 | 8.4 | 203.9 | 20.0 | 20.2 | 19.5 | 16.1 | -0.53 | 0.00 | 0.49 |
| 77 | 6 | 14 | 8 | 10.6 | 219.3 | 12.9 | 199.8 | 14.0 | 234.5 | 21.9 | 21.6 | 20.9 | 16.0 | -1.00 | 0.00 | 0.79 |
| 77 | 6 | 14 | 9 | 12.2 | 220.2 | 15.2 | 202.9 | 17.5 | 232.4 | 22.9 | 22.2 | 21.6 | 15.8 | -1.31 | 0.00 | 1.05 |
| 77 | 6 | 14 | 10 | 12.4 | 240.5 | 15.0 | 216.3 | 17.3 | 239.1 | 23.8 | 22.9 | 22.4 | 15.4 | -1.39 | 0.00 | 1.26 |
| 77 | 6 | 14 | 11 | 13.8 | 236.7 | 17.0 | 214.4 | 20.5 | 237.7 | 24.6 | 23.6 | 23.1 | 15.1 | -1.54 | 0.00 | 1.41 |
| 77 | 6 | 14 | 12 | 14.5 | 232.9 | 18.0 | 211.1 | 21.7 | 236.4 | 25.5 | 24.3 | 24.0 | 14.8 | -1.51 | 0.00 | 1.46 |
| 77 | 6 | 14 | 13 | 16.4 | 219.6 | 21.2 | 199.3 | 23.6 | 225.4 | 25.9 | 24.6 | 24.6 | 14.8 | -1.31 | 0.00 | 1.44 |
| 77 | 6 | 14 | 14 | 15.9 | 244.0 | 19.6 | 223.4 | 24.1 | 244.9 | 26.1 | 25.1 | 24.8 | 14.7 | -1.30 | 0.00 | 1.36 |
| 77 | 6 | 14 | 15 | 14.6 | 236.4 | 17.6 | 214.3 | 20.5 | 239.3 | 26.2 | 25.3 | 24.9 | 14.7 | -1.22 | 0.00 | 1.18 |
| 77 | 6 | 14 | 16 | 14.7 | 224.9 | 18.3 | 204.3 | 21.5 | 229.5 | 26.0 | 25.3 | 24.9 | 14.8 | -1.11 | 0.00 | 0.93 |
| 77 | 6 | 14 | 17 | 14.0 | 230.3 | 17.5 | 211.6 | 21.8 | 236.1 | 25.6 | 25.3 | 24.8 | 14.9 | -0.79 | 0.00 | 0.67 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 14 | 18 | 12.0 | 229.8 | 15.4 | 211.1 | 19.3 | 234.8 | 25.0 | 25.0 | 24.5 | 15.0 | -0.50 | 0.00 | 0.38 |
| 77 | 6 | 14 | 19 | 8.2 | 256.3 | 9.6 | 227.5 | 14.2 | 247.0 | 23.7 | 23.9 | 23.4 | 15.4 | -0.23 | 0.00 | 0.09 |
| 77 | 6 | 14 | 20 | 7.3 | 264.2 | 8.8 | 231.3 | 15.3 | 247.5 | 22.0 | 22.3 | 22.2 | 16.3 | 0.18 | 0.00 | 0.00 |
| 77 | 6 | 14 | 21 | 8.3 | 273.4 | 9.2 | 235.1 | 15.8 | 250.3 | 21.0 | 21.3 | 21.4 | 16.7 | 0.36 | 0.00 | 0.00 |
| 77 | 6 | 14 | 22 | 5.5 | 272.7 | 7.1 | 234.4 | 13.3 | 243.4 | 19.5 | 19.9 | 20.3 | 17.3 | 0.79 | 0.00 | 0.00 |
| 77 | 6 | 14 | 23 | 8.6 | 295.2 | 8.4 | 254.2 | 12.8 | 247.3 | 18.7 | 19.3 | 19.7 | 17.5 | 0.94 | 0.00 | 0.00 |
| 77 | 6 | 14 | 24 | 9.9 | 291.5 | 11.4 | 260.4 | 14.5 | 262.4 | 18.5 | 19.3 | 19.6 | 17.6 | 1.09 | 0.00 | 0.00 |
| 77 | 6 | 15 | 1 | 10.5 | 306.3 | 15.0 | 293.9 | 18.0 | 317.6 | 17.1 | 18.7 | 19.0 | 18.0 | 1.85 | 0.00 | 0.00 |
| 77 | 6 | 15 | 2 | 11.4 | 308.6 | 15.9 | 296.3 | 18.3 | 322.5 | 16.7 | 18.3 | 18.3 | 18.2 | 1.58 | 0.00 | 0.00 |
| 77 | 6 | 15 | 3 | 8.8 | 291.8 | 12.2 | 284.2 | 14.7 | 313.9 | 16.6 | 17.8 | 18.1 | 18.3 | 1.45 | 0.00 | 0.00 |
| 77 | 6 | 15 | 4 | 9.4 | 287.2 | 12.2 | 279.0 | 13.7 | 311.2 | 16.9 | 18.0 | 18.2 | 18.2 | 1.27 | 0.00 | 0.00 |
| 77 | 6 | 15 | 5 | 9.8 | 285.6 | 12.7 | 277.3 | 14.4 | 311.9 | 16.7 | 17.7 | 18.1 | 18.3 | 1.41 | 0.00 | 0.03 |
| 77 | 6 | 15 | 6 | 9.5 | 273.1 | 12.2 | 261.3 | 13.3 | 293.8 | 17.9 | 18.5 | 18.1 | 17.6 | 0.25 | 0.00 | 0.21 |
| 77 | 6 | 15 | 7 | 6.7 | 274.7 | 7.6 | 254.8 | 8.2 | 277.6 | 19.3 | 19.3 | 18.6 | 16.8 | -0.73 | 0.00 | 0.48 |
| 77 | 6 | 15 | 8 | 7.2 | 287.9 | 7.9 | 264.9 | 8.4 | 281.5 | 20.2 | 20.1 | 19.4 | 16.4 | -0.86 | 0.00 | 0.76 |
| 77 | 6 | 15 | 9 | 6.4 | 253.7 | 7.6 | 226.2 | 8.4 | 244.8 | 21.4 | 21.1 | 20.4 | 16.1 | -0.97 | 0.00 | 1.01 |
| 77 | 6 | 15 | 10 | 10.3 | 238.4 | 12.4 | 220.0 | 14.0 | 241.5 | 22.7 | 22.1 | 21.6 | 15.6 | -1.16 | 0.00 | 1.23 |
| 77 | 6 | 15 | 11 | 14.2 | 232.4 | 17.7 | 211.8 | 20.1 | 235.0 | 23.8 | 22.7 | 22.4 | 15.3 | -1.37 | 0.00 | 1.37 |
| 77 | 6 | 15 | 12 | 16.6 | 220.5 | 20.6 | 201.3 | 22.4 | 228.7 | 24.5 | 23.4 | 23.3 | 15.0 | -1.20 | 0.00 | 1.44 |
| 77 | 6 | 15 | 13 | 17.8 | 224.5 | 22.4 | 205.7 | 25.3 | 234.3 | 25.1 | 23.9 | 23.9 | 14.9 | -1.26 | 0.00 | 1.43 |
| 77 | 6 | 15 | 14 | 13.8 | 245.4 | 16.2 | 223.2 | 17.8 | 243.6 | 25.1 | 24.2 | 23.9 | 14.7 | -1.27 | 0.00 | 1.34 |
| 77 | 6 | 15 | 15 | 13.1 | 224.2 | 16.3 | 203.9 | 18.1 | 231.8 | 25.4 | 24.6 | 24.2 | 14.7 | -1.22 | 0.00 | 1.17 |
| 77 | 6 | 15 | 16 | 13.9 | 224.8 | 17.9 | 206.5 | 20.5 | 232.6 | 25.2 | 24.5 | 24.1 | 14.8 | -1.02 | 0.00 | 0.93 |
| 77 | 6 | 15 | 17 | 11.7 | 232.4 | 14.3 | 213.6 | 17.6 | 238.8 | 24.9 | 24.6 | 24.0 | 14.9 | -0.90 | 0.00 | 0.66 |
| 77 | 6 | 15 | 18 | 10.4 | 257.1 | 12.5 | 231.1 | 15.5 | 250.8 | 24.3 | 24.2 | 23.6 | 15.0 | -0.67 | 0.00 | 0.37 |
| 77 | 6 | 15 | 19 | 7.7 | 265.0 | 9.7 | 241.0 | 12.8 | 258.8 | 23.2 | 23.5 | 23.0 | 15.5 | -0.17 | 0.00 | 0.08 |
| 77 | 6 | 15 | 20 | 9.3 | 273.3 | 10.6 | 252.0 | 11.8 | 272.3 | 21.9 | 22.7 | 22.5 | 16.3 | 0.55 | 0.00 | 0.00 |
| 77 | 6 | 15 | 21 | 9.3 | 269.8 | 10.1 | 238.3 | 11.1 | 252.2 | 21.1 | 22.1 | 22.2 | 16.6 | 1.11 | 0.00 | 0.00 |
| 77 | 6 | 15 | 22 | 10.9 | 273.9 | 12.1 | 245.9 | 13.2 | 259.4 | 20.4 | 21.4 | 21.3 | 16.8 | 0.89 | 0.00 | 0.00 |
| 77 | 6 | 15 | 23 | 12.7 | 274.3 | 16.0 | 253.0 | 17.8 | 275.0 | 19.1 | 20.7 | 20.6 | 17.3 | 1.46 | 0.00 | 0.00 |
| 77 | 6 | 15 | 24 | 12.2 | 298.8 | 15.3 | 286.6 | 17.3 | 317.0 | 18.6 | 19.6 | 19.7 | 17.5 | 1.14 | 0.00 | 0.00 |
| 77 | 6 | 16 | 1 | 10.0 | 365.3 | 12.6 | 356.2 | 15.2 | 27.1 | 16.4 | 17.4 | 17.4 | 18.3 | 0.93 | 0.00 | 0.00 |
| 77 | 6 | 16 | 2 | 7.6 | 365.0 | 10.0 | 365.0 | 12.6 | 40.4 | 15.6 | 16.4 | 16.4 | 18.6 | 0.77 | 0.00 | 0.00 |
| 77 | 6 | 16 | 3 | 4.3 | 310.4 | 4.1 | 316.8 | 5.3 | 25.6 | 15.4 | 15.3 | 15.7 | 18.9 | 0.27 | 0.00 | 0.00 |
| 77 | 6 | 16 | 4 | 5.2 | 324.5 | 5.3 | 318.6 | 6.0 | 17.1 | 15.2 | 15.3 | 15.4 | 19.0 | 0.26 | 0.00 | 0.00 |
| 77 | 6 | 16 | 5 | 5.2 | 328.3 | 5.4 | 316.0 | 4.7 | 24.3 | 15.1 | 15.4 | 15.6 | 19.0 | 0.51 | 0.00 | 0.03 |
| 77 | 6 | 16 | 6 | 2.4 | 300.7 | 2.9 | 292.6 | 2.0 | 328.0 | 16.0 | 16.3 | 16.0 | 18.0 | 0.01 | 0.00 | 0.19 |
| 77 | 6 | 16 | 7 | 2.7 | 190.6 | 2.9 | 167.2 | 2.8 | 217.5 | 17.9 | 18.6 | 17.4 | 16.4 | -0.47 | 0.00 | 0.47 |
| 77 | 6 | 16 | 8 | 4.6 | 154.7 | 5.3 | 132.8 | 5.5 | 161.0 | 19.3 | 19.7 | 18.7 | 15.8 | -0.63 | 0.00 | 0.75 |
| 77 | 6 | 16 | 9 | 6.3 | 111.3 | 6.9 | 83.8 | 7.2 | 112.3 | 20.5 | 20.5 | 19.7 | 16.0 | -0.75 | 0.00 | 1.01 |
| 77 | 6 | 16 | 10 | 6.9 | 341.0 | 7.3 | 317.1 | 8.1 | 334.8 | 21.9 | 21.8 | 21.0 | 15.6 | -0.84 | 0.00 | 1.23 |
| 77 | 6 | 16 | 11 | 7.5 | 292.9 | 8.0 | 257.4 | 8.9 | 274.6 | 23.3 | 22.9 | 22.2 | 15.1 | -1.11 | 0.00 | 1.37 |
| 77 | 6 | 16 | 12 | 6.7 | 260.3 | 7.7 | 151.5 | 8.9 | 263.3 | 24.1 | 23.7 | 23.0 | 14.7 | -1.07 | 0.00 | 1.44 |
| 77 | 6 | 16 | 13 | 10.9 | 214.3 | 13.4 | 190.5 | 14.4 | 221.8 | 24.6 | 23.7 | 23.2 | 15.0 | -1.37 | 0.00 | 1.39 |
| 77 | 6 | 16 | 14 | 11.3 | 235.1 | 13.5 | 211.5 | 15.0 | 243.4 | 25.1 | 24.3 | 23.8 | 14.9 | -1.32 | 0.00 | 1.31 |
| 77 | 6 | 16 | 15 | 11.2 | 266.3 | 13.0 | 239.4 | 13.9 | 260.4 | 25.4 | 24.6 | 24.2 | 14.9 | -1.14 | 0.00 | 1.15 |
| 77 | 6 | 16 | 16 | 11.9 | 241.6 | 14.6 | 214.6 | 16.5 | 246.0 | 25.9 | 25.3 | 24.8 | 14.8 | -1.10 | 0.00 | 0.90 |
| 77 | 6 | 16 | 17 | 11.6 | 245.2 | 14.4 | 217.9 | 17.2 | 248.5 | 25.5 | 25.2 | 24.7 | 14.9 | -0.88 | 0.00 | 0.61 |
| 77 | 6 | 16 | 18 | 10.0 | 235.8 | 12.9 | 213.4 | 16.1 | 242.5 | 24.6 | 24.6 | 24.1 | 15.3 | -0.56 | 0.00 | 0.31 |
| 77 | 6 | 16 | 19 | 6.6 | 245.3 | 8.9 | 218.3 | 12.9 | 244.1 | 22.9 | 23.1 | 22.8 | 16.0 | -0.15 | 0.00 | 0.07 |
| 77 | 6 | 16 | 20 | 5.0 | 263.5 | 6.9 | 228.3 | 12.2 | 247.1 | 21.2 | 21.5 | 21.6 | 16.7 | 0.39 | 0.00 | 0.00 |
| 77 | 6 | 16 | 21 | 8.0 | 290.0 | 9.7 | 251.1 | 13.5 | 263.3 | 20.0 | 20.7 | 20.9 | 17.1 | 0.91 | 0.00 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL. | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 16 | 22 | 10.9 | 298.2 | 13.8 | 282.4 | 14.9 | 314.1 | 20.2 | 21.5 | 21.3 | 16.9 | 1.08 | 0.00 | 0.00 |
| 77 | 6 | 16 | 23 | 11.4 | 298.6 | 14.5 | 280.5 | 15.5 | 311.3 | 19.5 | 20.8 | 20.7 | 17.1 | 1.14 | 0.00 | 0.00 |
| 77 | 6 | 16 | 24 | 9.5 | 327.4 | 11.6 | 309.1 | 12.4 | 342.1 | 18.9 | 20.2 | 20.0 | 17.4 | 1.11 | 0.00 | 0.00 |
| 77 | 6 | 17 | 1 | 3.6 | 330.1 | 3.5 | 357.2 | 5.1 | 66.6 | 17.9 | 17.8 | 18.7 | 18.1 | 0.78 | 0.00 | 0.00 |
| 77 | 6 | 17 | 2 | 2.6 | 284.5 | 2.3 | 335.8 | 2.8 | 94.2 | 17.6 | 15.4 | 18.0 | 18.6 | 0.38 | 0.00 | 0.00 |
| 77 | 6 | 17 | 3 | 3.1 | 292.4 | 2.4 | 298.9 | 3.4 | 89.1 | 17.0 | 16.1 | 17.4 | 18.5 | 0.50 | 0.00 | 0.00 |
| 77 | 6 | 17 | 4 | 3.2 | 228.2 | 3.3 | 186.5 | 3.7 | 181.3 | 17.1 | 16.8 | 17.2 | 18.5 | 0.09 | 0.00 | 0.00 |
| 77 | 6 | 17 | 5 | 4.4 | 246.3 | 4.1 | 198.3 | 4.3 | 205.4 | 17.1 | 17.2 | 17.2 | 18.3 | 0.16 | 0.00 | 0.03 |
| 77 | 6 | 17 | 6 | 3.1 | 253.8 | 3.8 | 202.3 | 4.5 | 214.9 | 17.5 | 18.2 | 17.6 | 17.3 | 0.04 | 0.00 | 0.22 |
| 77 | 6 | 17 | 7 | 3.4 | 177.0 | 3.9 | 149.3 | 4.2 | 171.1 | 19.0 | 19.5 | 18.4 | 16.0 | -0.58 | 0.00 | 0.46 |
| 77 | 6 | 17 | 8 | 5.1 | 128.7 | 5.8 | 98.1 | 6.6 | 126.3 | 19.8 | 20.1 | 19.2 | 15.7 | -0.67 | 0.00 | 0.75 |
| 77 | 6 | 17 | 9 | 5.9 | 102.5 | 6.8 | 77.3 | 7.6 | 109.3 | 21.0 | 21.1 | 20.3 | 15.7 | -0.72 | 0.00 | 0.96 |
| 77 | 6 | 17 | 10 | 5.9 | 189.0 | 6.8 | 161.8 | 7.2 | 193.9 | 23.4 | 23.3 | 22.5 | 14.9 | -0.91 | 0.00 | 1.24 |
| 77 | 6 | 17 | 11 | 10.0 | 255.3 | 11.0 | 219.9 | 12.0 | 242.2 | 24.9 | 24.4 | 23.8 | 14.5 | -1.11 | 0.00 | 1.39 |
| 77 | 6 | 17 | 12 | 13.5 | 226.4 | 16.3 | 199.2 | 17.8 | 229.8 | 25.4 | 24.3 | 24.0 | 14.7 | -1.35 | 0.00 | 1.36 |
| 77 | 6 | 17 | 13 | 13.7 | 228.5 | 16.7 | 200.8 | 18.4 | 233.1 | 25.9 | 24.9 | 24.6 | 14.7 | -1.28 | 0.00 | 1.39 |
| 77 | 6 | 17 | 14 | 15.5 | 238.5 | 19.1 | 209.1 | 22.6 | 241.7 | 26.6 | 25.5 | 25.2 | 14.6 | -1.31 | 0.00 | 1.39 |
| 77 | 6 | 17 | 15 | 18.4 | 224.1 | 22.7 | 199.3 | 26.5 | 235.3 | 26.7 | 25.7 | 25.6 | 14.7 | -1.03 | 0.00 | 1.21 |
| 77 | 6 | 17 | 16 | 16.1 | 221.1 | 20.3 | 198.2 | 23.0 | 230.7 | 26.6 | 25.9 | 25.7 | 14.8 | -0.91 | 0.00 | 0.96 |
| 77 | 6 | 17 | 17 | 12.7 | 231.5 | 16.2 | 207.9 | 19.3 | 239.6 | 26.4 | 26.0 | 25.6 | 15.0 | -0.81 | 0.00 | 0.70 |
| 77 | 6 | 17 | 18 | 11.4 | 236.9 | 14.7 | 215.5 | 18.9 | 242.8 | 25.2 | 25.3 | 24.8 | 15.3 | -0.39 | 0.00 | 0.26 |
| 77 | 6 | 17 | 19 | 8.2 | 242.0 | 10.5 | 219.6 | 15.9 | 249.8 | 23.5 | 23.7 | 23.3 | 15.6 | -0.14 | 0.00 | 0.10 |
| 77 | 6 | 17 | 20 | 7.4 | 244.5 | 9.6 | 224.4 | 16.5 | 248.5 | 22.3 | 22.5 | 22.3 | 16.0 | 0.08 | 0.00 | 0.01 |
| 77 | 6 | 17 | 21 | 8.9 | 278.5 | 9.8 | 234.8 | 16.1 | 253.9 | 21.5 | 21.7 | 21.6 | 16.4 | 0.16 | 0.00 | 0.00 |
| 77 | 6 | 17 | 22 | 9.9 | 282.4 | 10.2 | 237.1 | 16.5 | 254.4 | 20.7 | 21.0 | 20.9 | 17.0 | 0.17 | 0.00 | 0.00 |
| 77 | 6 | 17 | 23 | 5.8 | 262.8 | 8.0 | 233.4 | 16.1 | 252.1 | 20.0 | 20.3 | 20.4 | 17.4 | 0.34 | 0.00 | 0.00 |
| 77 | 6 | 17 | 24 | 6.2 | 268.1 | 8.0 | 232.0 | 15.3 | 250.5 | 19.9 | 20.2 | 20.3 | 17.4 | 0.35 | 0.00 | 0.00 |
| 77 | 6 | 18 | 1 | 7.0 | 264.4 | 9.0 | 250.0 | 11.8 | 283.0 | 18.5 | 19.5 | 19.7 | 17.9 | 1.12 | 0.00 | 0.00 |
| 77 | 6 | 18 | 2 | 5.7 | 276.9 | 7.6 | 237.3 | 9.5 | 268.9 | 16.2 | 17.0 | 17.5 | 18.7 | 1.31 | 0.00 | 0.00 |
| 77 | 6 | 18 | 3 | 11.7 | 264.8 | 15.0 | 248.5 | 17.5 | 280.8 | 16.7 | 18.0 | 18.3 | 18.5 | 1.63 | 0.00 | 0.00 |
| 77 | 6 | 18 | 4 | 12.7 | 273.1 | 16.6 | 248.6 | 19.7 | 276.4 | 16.7 | 17.9 | 17.9 | 18.4 | 1.19 | 0.00 | 0.00 |
| 77 | 6 | 18 | 5 | 7.4 | 244.5 | 10.2 | 233.2 | 13.7 | 268.7 | 15.6 | 16.5 | 16.5 | 18.7 | 0.89 | 0.00 | 0.03 |
| 77 | 6 | 18 | 6 | 4.2 | 107.9 | 5.3 | 76.2 | 6.6 | 96.9 | 13.0 | 13.8 | 13.0 | 19.2 | -0.01 | 0.00 | 0.21 |
| 77 | 6 | 18 | 7 | 3.1 | 94.8 | 3.4 | 71.4 | 3.6 | 108.2 | 14.1 | 15.0 | 13.5 | 17.9 | -0.52 | 0.00 | 0.48 |
| 77 | 6 | 18 | 8 | 4.3 | 115.2 | 4.9 | 91.8 | 5.2 | 132.1 | 16.9 | 17.4 | 16.3 | 16.6 | -0.59 | 0.00 | 0.76 |
| 77 | 6 | 18 | 9 | 12.0 | 247.6 | 14.9 | 216.8 | 17.1 | 248.4 | 21.4 | 20.7 | 20.2 | 16.1 | -1.11 | 0.00 | 1.04 |
| 77 | 6 | 18 | 10 | 14.2 | 242.1 | 17.3 | 214.0 | 19.9 | 248.0 | 22.2 | 21.3 | 20.9 | 15.8 | -1.37 | 0.00 | 1.26 |
| 77 | 6 | 18 | 11 | 11.7 | 241.1 | 14.2 | 215.3 | 16.0 | 246.5 | 22.6 | 21.7 | 21.3 | 15.5 | -1.28 | 0.00 | 1.40 |
| 77 | 6 | 18 | 12 | 11.0 | 238.9 | 13.5 | 212.9 | 15.0 | 243.4 | 23.2 | 22.3 | 21.8 | 15.2 | -1.36 | 0.00 | 1.44 |
| 77 | 6 | 18 | 13 | 12.1 | 249.4 | 14.5 | 221.3 | 16.4 | 251.2 | 23.9 | 22.9 | 22.6 | 15.0 | -1.29 | 0.00 | 1.43 |
| 77 | 6 | 18 | 14 | 11.3 | 243.7 | 13.1 | 218.3 | 15.4 | 247.9 | 24.5 | 23.7 | 25.4 | 14.7 | 0.87 | 0.00 | 1.34 |
| 77 | 6 | 18 | 15 | 11.3 | 252.1 | 13.7 | 226.0 | 15.2 | 251.9 | 24.9 | 24.1 | 25.9 | 14.5 | 0.98 | 0.00 | 1.17 |
| 77 | 6 | 18 | 16 | 10.8 | 230.3 | 13.5 | 206.2 | 15.0 | 236.2 | 24.8 | 24.2 | 25.8 | 14.6 | 1.01 | 0.00 | 0.93 |
| 77 | 6 | 18 | 17 | 10.3 | 230.2 | 13.4 | 205.7 | 15.4 | 237.8 | 24.6 | 24.2 | 25.5 | 14.7 | 0.90 | 0.00 | 0.66 |
| 77 | 6 | 18 | 18 | 10.3 | 222.0 | 13.4 | 201.0 | 15.6 | 231.1 | 23.8 | 23.8 | 24.7 | 14.9 | 0.90 | 0.00 | 0.37 |
| 77 | 6 | 18 | 19 | 8.3 | 230.3 | 11.4 | 207.0 | 14.4 | 233.1 | 22.7 | 23.0 | 23.2 | 15.4 | 0.48 | 0.00 | 0.09 |
| 77 | 6 | 18 | 20 | 6.5 | 278.2 | 8.4 | 230.5 | 14.5 | 243.5 | 20.5 | 20.9 | 20.5 | 16.6 | -0.05 | 0.00 | 0.00 |
| 77 | 6 | 18 | 21 | 10.3 | 265.2 | 12.4 | 249.0 | 14.8 | 257.1 | 19.4 | 20.4 | 19.7 | 17.0 | 0.29 | 0.00 | 0.00 |
| 77 | 6 | 18 | 22 | 11.4 | 273.4 | 12.7 | 243.9 | 13.5 | 262.9 | 19.9 | 21.0 | 19.8 | 16.7 | -0.13 | 0.00 | 0.00 |
| 77 | 6 | 18 | 23 | 10.1 | 273.1 | 11.0 | 241.2 | 11.9 | 254.7 | 19.9 | 20.7 | 19.2 | 16.7 | -0.68 | 0.00 | 0.00 |
| 77 | 6 | 18 | 24 | 7.0 | 400.9 | 8.3 | 100.7 | 10.2 | 123.4 | 17.1 | 17.6 | 17.6 | 17.7 | 0.52 | 0.00 | 0.00 |
| 77 | 6 | 19 | 1 | 2.6 | 113.5 | 3.9 | 38.5 | 5.7 | 53.1 | 14.6 | 14.1 | 14.1 | 19.6 | -0.47 | 0.00 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 19 | 2 | 1.3 | 240.2 | 1.5 | 276.1 | 1.6 | 371.7 | 14.2 | 11.5 | 11.7 | 20.7 | -2.41 | 0.00 | 0.00 |
| 77 | 6 | 19 | 3 | 2.2 | 344.7 | 2.2 | 347.2 | 2.1 | 58.9 | 13.3 | 12.0 | 10.6 | 21.4 | -2.67 | 0.00 | 0.00 |
| 77 | 6 | 19 | 4 | 3.0 | 328.9 | 2.7 | 359.3 | 4.4 | 62.2 | 12.2 | 11.8 | 10.8 | 22.7 | -1.40 | 0.00 | 0.00 |
| 77 | 6 | 19 | 5 | 3.7 | 332.8 | 3.8 | 337.0 | 4.9 | 31.6 | 11.3 | 11.2 | 10.4 | 26.1 | -0.88 | 0.00 | 0.03 |
| 77 | 6 | 19 | 6 | 2.2 | 129.7 | 2.7 | 364.4 | 2.8 | 55.6 | 11.8 | 12.8 | 11.7 | 21.0 | -0.12 | 0.00 | 0.21 |
| 77 | 6 | 19 | 7 | 2.6 | 84.4 | 2.9 | 64.3 | 2.9 | 104.4 | 13.3 | 14.6 | 14.3 | 18.4 | 1.01 | 0.00 | 0.48 |
| 77 | 6 | 19 | 8 | 3.8 | 102.6 | 4.5 | 83.6 | 4.6 | 112.8 | 15.5 | 16.0 | 16.8 | 17.3 | 1.30 | 0.00 | 0.77 |
| 77 | 6 | 19 | 9 | 4.3 | 136.6 | 4.8 | 116.5 | 5.2 | 152.0 | 18.6 | 19.1 | 19.9 | 16.4 | 1.27 | 0.00 | 1.02 |
| 77 | 6 | 19 | 10 | 8.0 | 187.2 | 9.0 | 158.6 | 10.2 | 185.1 | 22.0 | 21.6 | 22.9 | 15.7 | 0.99 | 0.00 | 1.24 |
| 77 | 6 | 19 | 11 | 13.3 | 250.3 | 15.3 | 221.7 | 16.6 | 247.8 | 23.7 | 22.7 | 24.3 | 15.7 | 0.56 | 0.00 | 1.41 |
| 77 | 6 | 19 | 12 | 11.8 | 221.4 | 14.2 | 195.7 | 15.4 | 227.8 | 24.5 | 23.4 | 25.3 | 15.3 | 0.83 | 0.00 | 1.47 |
| 77 | 6 | 19 | 13 | 11.0 | 235.1 | 13.1 | 208.8 | 14.5 | 238.0 | 24.9 | 24.0 | 25.9 | 15.1 | 0.97 | 0.00 | 1.44 |
| 77 | 6 | 19 | 14 | 12.7 | 228.2 | 15.5 | 203.3 | 17.5 | 230.8 | 25.2 | 24.1 | 26.0 | 15.1 | 0.73 | 0.00 | 1.36 |
| 77 | 6 | 19 | 15 | 11.0 | 242.9 | 13.2 | 216.6 | 15.4 | 245.5 | 25.2 | 24.4 | 26.2 | 15.1 | 0.92 | 0.00 | 1.19 |
| 77 | 6 | 19 | 16 | 12.6 | 232.9 | 14.9 | 206.6 | 16.6 | 234.0 | 25.1 | 24.4 | 26.1 | 15.2 | 0.97 | 0.00 | 0.95 |
| 77 | 6 | 19 | 17 | 14.4 | 212.6 | 18.4 | 188.1 | 19.9 | 218.3 | 24.8 | 24.3 | 25.3 | 15.4 | 0.54 | 0.00 | 0.68 |
| 77 | 6 | 19 | 18 | 10.7 | 216.4 | 14.1 | 190.9 | 15.3 | 218.7 | 24.1 | 24.0 | 24.8 | 15.5 | 0.76 | 0.00 | 0.39 |
| 77 | 6 | 19 | 19 | 8.4 | 229.0 | 11.0 | 208.2 | 13.9 | 237.2 | 22.8 | 23.1 | 23.3 | 16.0 | 0.53 | 0.00 | 0.10 |
| 77 | 6 | 19 | 20 | 6.7 | 276.5 | 8.4 | 230.8 | 13.4 | 243.2 | 20.7 | 21.2 | 20.7 | 17.1 | -0.01 | 0.00 | 0.01 |
| 77 | 6 | 19 | 21 | 7.8 | 268.5 | 9.8 | 221.8 | 11.3 | 250.6 | 20.2 | 21.3 | 20.3 | 17.2 | 0.13 | 0.00 | 0.00 |
| 77 | 6 | 19 | 22 | 6.1 | 255.8 | 9.0 | 212.6 | 12.6 | 216.3 | 18.3 | 19.3 | 19.0 | 17.7 | 0.66 | 0.00 | 0.00 |
| 77 | 6 | 19 | 23 | 6.9 | 264.9 | 11.0 | 216.6 | 16.2 | 223.5 | 18.1 | 19.1 | 19.0 | 17.8 | 0.92 | 0.00 | 0.00 |
| 77 | 6 | 19 | 24 | 9.3 | 287.0 | 10.9 | 241.4 | 15.0 | 247.6 | 17.9 | 18.8 | 18.6 | 17.8 | 0.69 | 0.00 | 0.00 |
| 77 | 6 | 20 | 1 | 9.1 | 290.3 | 10.0 | 243.4 | 15.4 | 252.4 | 17.4 | 18.3 | 17.7 | 18.0 | 0.36 | 0.00 | 0.00 |
| 77 | 6 | 20 | 2 | 6.7 | 279.3 | 9.1 | 230.2 | 15.6 | 237.7 | 17.4 | 17.9 | 17.5 | 18.1 | 0.10 | 0.00 | 0.00 |
| 77 | 6 | 20 | 3 | 6.2 | 258.9 | 9.0 | 221.3 | 17.0 | 241.6 | 16.8 | 17.2 | 16.7 | 18.3 | -0.07 | 0.00 | 0.00 |
| 77 | 6 | 20 | 4 | 6.0 | 245.8 | 8.1 | 229.1 | 16.4 | 251.4 | 16.1 | 16.4 | 15.4 | 18.6 | -0.66 | 0.00 | 0.00 |
| 77 | 6 | 20 | 5 | 8.2 | 241.5 | 11.2 | 220.4 | 19.4 | 244.3 | 15.7 | 16.1 | 15.2 | 18.7 | -0.46 | 0.00 | 0.01 |
| 77 | 6 | 20 | 6 | 12.0 | 234.4 | 15.3 | 214.0 | 22.1 | 241.9 | 16.3 | 16.5 | 15.9 | 18.3 | -0.34 | 0.00 | 0.18 |
| 77 | 6 | 20 | 7 | 14.1 | 230.3 | 18.7 | 207.2 | 23.5 | 235.9 | 16.6 | 16.6 | 16.1 | 18.2 | -0.52 | 0.00 | 0.26 |
| 77 | 6 | 20 | 8 | 13.7 | 225.1 | 17.6 | 209.6 | 20.1 | 233.1 | 17.9 | 17.6 | 17.4 | 17.8 | -0.44 | 0.00 | 0.49 |
| 77 | 6 | 20 | 9 | 12.8 | 223.4 | 16.3 | 199.1 | 18.1 | 234.3 | 18.4 | 18.1 | 18.1 | 17.5 | -0.30 | 0.00 | 0.63 |
| 77 | 6 | 20 | 10 | 16.4 | 226.7 | 21.0 | 202.7 | 24.8 | 234.3 | 19.2 | 18.6 | 18.9 | 17.3 | -0.32 | 0.00 | 0.75 |
| 77 | 6 | 20 | 11 | 14.8 | 243.6 | 18.9 | 218.1 | 24.7 | 248.1 | 19.3 | 18.9 | 18.8 | 17.2 | -0.53 | 0.00 | 0.68 |
| 77 | 6 | 20 | 12 | 16.6 | 230.9 | 21.1 | 203.7 | 24.6 | 236.6 | 20.3 | 19.6 | 20.0 | 16.9 | -0.35 | 0.00 | 0.97 |
| 77 | 6 | 20 | 13 | 15.6 | 231.4 | 19.8 | 205.8 | 23.4 | 237.7 | 21.8 | 20.7 | 21.9 | 16.4 | 0.08 | 0.00 | 1.45 |
| 77 | 6 | 20 | 14 | 17.4 | 226.6 | 21.7 | 200.5 | 23.9 | 229.5 | 22.2 | 21.0 | 22.4 | 16.4 | 0.23 | 0.00 | 1.35 |
| 77 | 6 | 20 | 15 | 15.7 | 223.4 | 20.1 | 199.8 | 22.6 | 233.3 | 22.7 | 21.7 | 23.1 | 16.0 | 0.41 | 0.00 | 1.19 |
| 77 | 6 | 20 | 16 | 13.8 | 238.9 | 17.2 | 212.6 | 20.3 | 243.7 | 23.0 | 22.3 | 23.5 | 15.8 | 0.46 | 0.00 | 0.94 |
| 77 | 6 | 20 | 17 | 12.9 | 250.7 | 15.9 | 222.4 | 20.1 | 250.2 | 22.5 | 22.2 | 23.0 | 15.9 | 0.48 | 0.00 | 0.68 |
| 77 | 6 | 20 | 18 | 11.6 | 258.8 | 13.6 | 230.0 | 17.3 | 257.7 | 21.7 | 21.6 | 22.1 | 16.1 | 0.37 | 0.00 | 0.39 |
| 77 | 6 | 20 | 19 | 8.1 | 270.6 | 9.8 | 237.8 | 13.0 | 261.4 | 20.6 | 20.8 | 20.8 | 16.4 | 0.22 | 0.00 | 0.09 |
| 77 | 6 | 20 | 20 | 8.7 | 280.8 | 10.4 | 247.6 | 12.6 | 269.1 | 19.1 | 19.6 | 18.4 | 17.3 | -0.69 | 0.00 | 0.01 |
| 77 | 6 | 20 | 21 | 8.8 | 281.3 | 9.2 | 248.0 | 10.1 | 269.7 | 18.6 | 19.4 | 17.7 | 17.4 | -0.95 | 0.00 | 0.00 |
| 77 | 6 | 20 | 22 | 6.0 | 354.1 | 7.8 | 332.6 | 9.1 | 357.9 | 16.2 | 16.8 | 16.3 | 18.2 | 0.07 | 0.00 | 0.00 |
| 77 | 6 | 20 | 23 | 2.8 | 322.0 | 3.5 | 308.5 | 4.5 | 388.3 | 13.8 | 13.4 | 13.0 | 19.5 | -0.74 | 0.00 | 0.00 |
| 77 | 6 | 20 | 24 | 4.7 | 339.5 | 5.4 | 340.6 | 7.4 | 36.9 | 13.2 | 13.4 | 12.5 | 19.7 | -0.67 | 0.00 | 0.00 |
| 77 | 6 | 21 | 1 | 3.5 | 329.1 | 3.6 | 358.6 | 5.8 | 60.7 | 13.0 | 12.9 | 12.8 | 19.8 | -0.26 | 0.00 | 0.00 |
| 77 | 6 | 21 | 2 | 2.6 | 262.3 | 2.5 | 266.6 | 2.8 | 128.9 | 13.0 | 11.8 | 11.2 | 20.0 | -1.76 | 0.00 | 0.00 |
| 77 | 6 | 21 | 3 | 4.4 | 231.3 | 5.0 | 194.5 | 5.0 | 197.1 | 12.8 | 13.5 | 11.4 | 19.8 | -1.41 | 0.00 | 0.00 |
| 77 | 6 | 21 | 4 | 6.5 | 252.6 | 6.4 | 210.4 | 6.2 | 214.3 | 13.2 | 13.7 | 11.8 | 19.5 | -1.43 | 0.00 | 0.00 |
| 77 | 6 | 21 | 5 | 4.4 | 294.9 | 3.4 | 266.1 | 2.7 | 292.1 | 13.7 | 13.5 | 11.5 | 19.4 | -2.15 | 0.00 | 0.03 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 21 | 6 | 2.5 | 375.8 | 2.6 | 364.5 | 2.7 | 57.6 | 14.0 | 14.8 | 13.8 | 18.4 | -0.19 | 0.00 | 0.20 |
| 77 | 6 | 21 | 7 | 3.4 | 107.3 | 3.7 | 79.7 | 3.8 | 108.6 | 15.0 | 15.8 | 16.1 | 17.1 | 1.11 | 0.00 | 0.47 |
| 77 | 6 | 21 | 8 | 4.1 | 102.4 | 4.6 | 73.3 | 5.3 | 99.8 | 15.8 | 16.4 | 17.6 | 17.0 | 1.78 | 0.00 | 0.75 |
| 77 | 6 | 21 | 9 | 6.7 | 99.2 | 7.5 | 75.3 | 8.0 | 102.8 | 17.2 | 17.2 | 19.0 | 17.1 | 1.77 | 0.00 | 1.01 |
| 77 | 6 | 21 | 10 | 6.3 | 82.4 | 6.6 | 64.0 | 7.5 | 91.8 | 19.0 | 19.0 | 20.7 | 16.6 | 1.68 | 0.00 | 1.22 |
| 77 | 6 | 21 | 11 | 6.3 | 216.0 | 7.3 | 190.8 | 7.6 | 211.6 | 20.6 | 20.5 | 21.8 | 16.0 | 1.20 | 0.00 | 0.79 |
| 77 | 6 | 21 | 12 | 9.5 | 298.2 | 10.5 | 273.4 | 12.0 | 292.7 | 21.3 | 20.6 | 20.9 | 16.5 | -0.46 | 0.00 | 0.50 |
| 77 | 6 | 21 | 13 | 13.1 | 321.0 | 14.2 | 296.1 | 15.1 | 316.8 | 24.1 | 21.2 | 22.3 | 16.0 | -1.79 | 0.00 | 1.43 |
| 77 | 6 | 21 | 14 | 9.2 | 233.0 | 10.2 | 217.4 | 10.7 | 242.3 | 25.6 | 22.2 | 23.6 | 15.6 | -1.97 | 0.00 | 1.03 |
| 77 | 6 | 21 | 15 | 10.2 | 282.4 | 11.1 | 257.0 | 12.2 | 274.4 | 25.6 | 22.7 | 24.6 | 15.4 | -0.94 | 0.00 | 1.21 |
| 77 | 6 | 21 | 16 | 9.2 | 271.4 | 10.1 | 251.5 | 10.7 | 270.2 | 23.2 | 22.7 | 24.1 | 15.7 | 0.88 | 0.00 | 0.72 |
| 77 | 6 | 21 | 17 | 13.3 | 305.7 | 15.0 | 295.3 | 16.1 | 301.4 | 22.3 | 21.9 | 22.3 | 16.2 | -0.04 | 0.00 | 0.57 |
| 77 | 6 | 21 | 18 | 17.5 | 352.0 | 19.3 | 342.8 | 20.1 | 351.3 | 21.0 | 20.7 | 21.5 | 16.8 | 0.45 | 0.00 | 0.48 |
| 77 | 6 | 21 | 19 | 15.4 | 359.2 | 17.1 | 351.5 | 18.3 | 361.6 | 18.4 | 18.5 | 18.5 | 17.8 | 0.06 | 0.00 | 0.07 |
| 77 | 6 | 21 | 20 | 8.9 | 332.2 | 10.7 | 336.3 | 12.4 | 355.7 | 16.5 | 17.0 | 16.4 | 18.4 | -0.01 | 0.00 | 0.01 |
| 77 | 6 | 21 | 21 | 7.6 | 305.5 | 8.5 | 319.0 | 9.1 | 348.6 | 15.8 | 16.3 | 15.7 | 18.6 | -0.12 | 0.00 | 0.00 |
| 77 | 6 | 21 | 22 | 7.3 | 316.7 | 10.0 | 317.0 | 12.1 | 330.5 | 14.1 | 15.1 | 15.0 | 19.3 | 0.87 | 0.00 | 0.00 |
| 77 | 6 | 21 | 23 | 2.3 | 257.1 | 3.3 | 387.9 | 6.1 | 53.3 | 13.9 | 13.9 | 13.8 | 20.0 | -0.14 | 0.00 | 0.00 |
| 77 | 6 | 21 | 24 | 3.3 | 302.6 | 3.1 | 351.9 | 4.5 | 50.1 | 13.9 | 13.3 | 12.6 | 20.0 | -1.33 | 0.00 | 0.00 |
| 77 | 6 | 22 | 1 | 4.9 | 328.6 | 6.3 | 354.5 | 9.0 | 28.6 | 13.0 | 13.4 | 12.9 | 20.0 | -0.10 | 0.00 | 0.00 |
| 77 | 6 | 22 | 2 | 4.7 | 311.5 | 5.3 | 337.1 | 7.7 | 16.8 | 12.4 | 12.7 | 12.4 | 20.3 | -0.01 | 0.00 | 0.00 |
| 77 | 6 | 22 | 3 | 5.4 | 316.9 | 6.2 | 338.2 | 8.7 | 14.1 | 11.8 | 12.2 | 11.6 | 20.5 | -0.23 | 0.00 | 0.00 |
| 77 | 6 | 22 | 4 | 6.4 | 310.8 | 7.5 | 324.8 | 8.1 | 359.9 | 11.3 | 12.1 | 11.3 | 20.8 | -0.01 | 0.00 | 0.00 |
| 77 | 6 | 22 | 5 | 5.2 | 301.0 | 5.1 | 309.0 | 4.0 | 352.2 | 11.8 | 12.0 | 10.9 | 20.8 | -0.86 | 0.00 | 0.03 |
| 77 | 6 | 22 | 6 | 3.5 | 321.1 | 3.4 | 320.9 | 2.9 | 11.3 | 12.8 | 13.1 | 12.5 | 19.6 | -0.30 | 0.00 | 0.20 |
| 77 | 6 | 22 | 7 | 4.5 | 46.2 | 5.0 | 38.1 | 5.2 | 50.0 | 14.3 | 14.8 | 15.0 | 18.5 | 0.74 | 0.00 | 0.46 |
| 77 | 6 | 22 | 8 | 5.4 | 100.3 | 6.0 | 85.4 | 6.8 | 92.5 | 15.1 | 15.3 | 16.5 | 18.1 | 1.35 | 0.00 | 0.75 |
| 77 | 6 | 22 | 9 | 5.2 | 113.7 | 5.4 | 99.5 | 5.8 | 107.0 | 16.3 | 16.6 | 18.2 | 17.9 | 1.90 | 0.00 | 1.00 |
| 77 | 6 | 22 | 10 | 4.7 | 73.1 | 5.1 | 59.4 | 5.6 | 72.6 | 18.5 | 18.7 | 20.3 | 17.2 | 1.74 | 0.00 | 1.21 |
| 77 | 6 | 22 | 11 | 6.3 | 65.0 | 6.9 | 48.0 | 7.2 | 51.4 | 20.3 | 20.1 | 22.4 | 16.9 | 2.13 | 0.00 | 1.40 |
| 77 | 6 | 22 | 12 | 10.1 | 272.7 | 11.1 | 263.7 | 12.2 | 273.3 | 22.0 | 21.3 | 23.6 | 16.4 | 1.58 | 0.00 | 1.50 |
| 77 | 6 | 22 | 13 | 11.0 | 305.4 | 12.3 | 293.2 | 13.2 | 299.5 | 22.4 | 21.6 | 23.2 | 16.4 | 0.77 | 0.00 | 1.31 |
| 77 | 6 | 22 | 14 | 7.5 | 291.9 | 8.5 | 278.9 | 9.4 | 280.5 | 21.8 | 21.8 | 22.6 | 16.6 | 0.77 | 0.00 | 0.66 |
| 77 | 6 | 22 | 15 | 8.0 | 332.3 | 8.5 | 315.9 | 8.8 | 321.6 | 22.5 | 22.6 | 24.0 | 15.9 | 1.50 | 0.00 | 1.14 |
| 77 | 6 | 22 | 16 | 9.9 | 343.3 | 10.9 | 332.7 | 11.6 | 340.3 | 22.5 | 22.4 | 23.0 | 16.6 | 0.52 | 0.00 | 0.75 |
| 77 | 6 | 22 | 17 | 8.2 | 321.5 | 8.9 | 310.4 | 9.4 | 318.7 | 22.9 | 22.8 | 23.8 | 16.2 | 0.89 | 0.00 | 0.66 |
| 77 | 6 | 22 | 18 | 9.7 | 327.3 | 10.8 | 316.3 | 11.5 | 325.9 | 22.7 | 22.6 | 23.1 | 16.5 | 0.39 | 0.00 | 0.38 |
| 77 | 6 | 22 | 19 | 9.9 | 333.7 | 11.5 | 326.3 | 12.4 | 336.8 | 21.8 | 22.0 | 21.9 | 17.1 | 0.15 | 0.00 | 0.11 |
| 77 | 6 | 22 | 20 | 9.7 | 298.5 | 11.2 | 306.4 | 12.4 | 324.5 | 19.4 | 20.9 | 20.5 | 18.1 | 1.08 | 0.00 | 0.02 |
| 77 | 6 | 22 | 21 | 10.5 | 292.8 | 11.9 | 301.7 | 12.7 | 319.4 | 18.9 | 20.6 | 20.1 | 18.2 | 1.24 | 0.00 | 0.01 |
| 77 | 6 | 22 | 22 | 8.3 | 293.4 | 8.5 | 300.8 | 8.4 | 326.5 | 19.3 | 20.5 | 19.7 | 17.8 | 0.42 | 0.00 | 0.00 |
| 77 | 6 | 22 | 23 | 8.8 | 295.8 | 9.9 | 300.6 | 10.2 | 329.8 | 18.8 | 20.1 | 19.4 | 17.8 | 0.58 | 0.00 | 0.00 |
| 77 | 6 | 22 | 24 | 8.1 | 324.0 | 10.3 | 326.1 | 11.5 | 343.6 | 17.6 | 18.8 | 18.8 | 18.1 | 1.22 | 0.00 | 0.00 |
| 77 | 6 | 23 | 1 | 7.2 | 313.8 | 9.6 | 332.2 | 12.1 | 364.8 | 15.8 | 17.5 | 17.3 | 18.8 | 1.53 | 0.00 | 0.00 |
| 77 | 6 | 23 | 2 | 5.6 | 321.0 | 8.2 | 336.3 | 11.5 | 9.8 | 15.8 | 17.0 | 17.0 | 18.8 | 1.13 | 0.00 | 0.00 |
| 77 | 6 | 23 | 3 | 7.5 | 326.0 | 11.0 | 334.3 | 14.3 | 358.1 | 15.1 | 16.3 | 16.2 | 19.0 | 1.07 | 0.00 | 0.00 |
| 77 | 6 | 23 | 4 | 2.7 | 237.3 | 2.8 | 362.1 | 4.0 | 18.5 | 15.5 | 14.8 | 14.9 | 19.3 | -0.61 | 0.00 | 0.00 |
| 77 | 6 | 23 | 5 | 3.0 | 249.5 | 2.4 | 307.4 | 2.9 | 72.0 | 15.2 | 14.7 | 13.7 | 19.2 | -1.44 | 0.00 | 0.02 |
| 77 | 6 | 23 | 6 | 2.3 | 372.6 | 2.5 | 375.7 | 3.2 | 46.4 | 15.6 | 16.1 | 15.1 | 18.3 | -0.52 | 0.00 | 0.17 |
| 77 | 6 | 23 | 7 | 4.0 | 70.1 | 4.1 | 65.6 | 4.4 | 74.3 | 16.8 | 17.7 | 17.5 | 17.1 | 0.69 | 0.00 | 0.46 |
| 77 | 6 | 23 | 8 | 7.6 | 68.0 | 8.2 | 57.0 | 8.6 | 67.0 | 18.1 | 18.2 | 19.7 | 17.1 | 1.53 | 0.00 | 0.74 |
| 77 | 6 | 23 | 9 | 6.3 | 78.1 | 6.8 | 61.3 | 7.3 | 80.7 | 21.2 | 19.8 | 21.5 | 16.7 | 0.26 | 0.00 | 1.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 23 | 10 | 6.6 | 79.0 | 6.9 | 55.3 | 7.3 | 82.0 | 24.5 | 21.4 | 23.1 | 15.9 | -1.37 | 0.00 | 1.16 |
| 77 | 6 | 23 | 11 | 7.5 | 159.8 | 8.1 | 135.4 | 8.6 | 157.4 | 24.9 | 22.7 | 23.3 | 15.1 | -1.51 | 0.00 | 1.47 |
| 77 | 6 | 23 | 12 | 7.2 | 419.7 | 7.6 | 393.0 | 7.6 | 419.8 | 23.3 | 23.5 | 22.4 | 14.6 | -0.88 | 0.00 | 0.97 |
| 77 | 6 | 23 | 13 | 8.7 | 45.1 | 9.4 | 22.6 | 9.6 | 46.1 | 24.2 | 23.8 | 23.2 | 14.5 | -0.98 | 0.00 | 1.32 |
| 77 | 6 | 23 | 14 | 8.7 | 360.1 | 9.2 | 337.3 | 9.9 | 361.4 | 25.3 | 24.7 | 24.1 | 14.1 | -1.28 | 0.00 | 1.40 |
| 77 | 6 | 23 | 15 | 9.9 | 388.0 | 10.6 | 363.3 | 10.8 | 28.3 | 25.1 | 24.8 | 24.2 | 14.3 | -0.94 | 0.00 | 0.89 |
| 77 | 6 | 23 | 16 | 8.6 | 27.3 | 9.2 | 362.6 | 9.7 | 27.7 | 25.1 | 24.9 | 24.3 | 14.5 | -0.76 | 0.00 | 0.54 |
| 77 | 6 | 23 | 17 | 8.5 | 24.8 | 9.3 | 348.0 | 9.9 | 24.9 | 25.1 | 25.0 | 24.4 | 14.6 | -0.70 | 0.00 | 0.26 |
| 77 | 6 | 23 | 18 | 16.0 | 15.8 | 17.7 | 338.4 | 18.6 | 14.1 | 24.8 | 24.6 | 24.2 | 14.8 | -0.68 | 0.00 | 0.34 |
| 77 | 6 | 23 | 19 | 9.0 | 361.7 | 10.8 | 328.2 | 11.7 | 93.4 | 23.0 | 23.0 | 22.6 | 15.5 | -0.46 | 0.00 | 0.04 |
| 77 | 6 | 23 | 20 | 10.9 | 237.1 | 14.4 | 202.9 | 17.5 | 231.9 | 19.6 | 19.7 | 19.4 | 16.8 | -0.14 | 0.00 | 0.01 |
| 77 | 6 | 23 | 21 | 5.7 | 264.6 | 6.6 | 226.2 | 8.1 | 250.1 | 19.2 | 19.5 | 19.5 | 17.0 | 0.31 | 0.00 | 0.00 |
| 77 | 6 | 23 | 22 | 5.3 | 224.2 | 6.1 | 184.3 | 6.9 | 215.3 | 17.4 | 17.8 | 18.0 | 17.8 | 0.66 | 0.00 | 0.00 |
| 77 | 6 | 23 | 23 | 8.9 | 271.5 | 9.4 | 235.8 | 10.1 | 271.1 | 18.9 | 19.7 | 19.7 | 17.3 | 0.80 | 0.00 | 0.00 |
| 77 | 6 | 23 | 24 | 5.1 | 391.4 | 5.6 | 352.5 | 6.4 | 377.1 | 17.9 | 18.5 | 18.5 | 17.6 | 0.60 | 0.00 | 0.00 |
| 77 | 6 | 24 | 1 | 5.1 | 257.9 | 4.1 | 229.7 | 3.6 | 346.6 | 17.2 | 17.3 | 17.3 | 18.2 | 0.15 | 0.00 | 0.00 |
| 77 | 6 | 24 | 2 | 4.6 | 331.8 | 4.5 | 322.5 | 4.7 | 365.3 | 17.5 | 17.9 | 18.3 | 18.0 | 0.74 | 0.00 | 0.00 |
| 77 | 6 | 24 | 3 | 3.9 | 302.4 | 3.6 | 305.9 | 2.8 | 359.3 | 17.2 | 17.1 | 17.5 | 18.3 | 0.30 | 0.00 | 0.00 |
| 77 | 6 | 24 | 4 | 7.0 | 322.5 | 7.0 | 304.3 | 6.6 | 348.9 | 17.4 | 17.8 | 18.0 | 18.0 | 0.61 | 0.00 | 0.00 |
| 77 | 6 | 24 | 5 | 5.9 | 337.5 | 7.0 | 323.9 | 8.4 | 17.9 | 16.2 | 16.9 | 17.4 | 18.5 | 1.21 | 0.00 | 0.03 |
| 77 | 6 | 24 | 6 | 2.7 | 386.2 | 2.6 | 379.2 | 3.3 | 77.7 | 16.1 | 17.0 | 16.4 | 17.8 | 0.30 | 0.00 | 0.20 |
| 77 | 6 | 24 | 7 | 4.3 | 75.0 | 4.6 | 44.4 | 4.8 | 72.9 | 17.8 | 18.5 | 17.3 | 16.7 | -0.46 | 0.00 | 0.48 |
| 77 | 6 | 24 | 8 | 4.5 | 88.6 | 4.8 | 56.0 | 5.1 | 83.4 | 19.2 | 19.6 | 18.6 | 16.3 | -0.57 | 0.00 | 0.74 |
| 77 | 6 | 24 | 9 | 6.7 | 94.8 | 7.4 | 60.9 | 7.8 | 90.9 | 20.5 | 20.5 | 19.8 | 16.3 | -0.76 | 0.00 | 0.99 |
| 77 | 6 | 24 | 10 | 7.2 | 77.1 | 7.5 | 47.1 | 7.7 | 73.1 | 21.8 | 21.8 | 21.1 | 16.0 | -0.78 | 0.00 | 1.20 |
| 77 | 6 | 24 | 11 | 8.5 | 79.4 | 9.5 | 48.4 | 10.5 | 79.4 | 23.1 | 22.9 | 22.1 | 15.3 | -1.00 | 0.00 | 1.41 |
| 77 | 6 | 24 | 12 | 7.6 | 355.3 | 8.4 | 324.1 | 8.7 | 362.0 | 22.8 | 22.7 | 22.0 | 15.8 | -0.76 | 0.00 | 0.73 |
| 77 | 6 | 24 | 13 | 8.4 | 390.7 | 9.2 | 361.0 | 9.6 | 388.7 | 24.0 | 24.0 | 23.1 | 15.2 | -0.90 | 0.00 | 0.74 |
| 77 | 6 | 24 | 14 | 12.1 | 352.6 | 13.4 | 322.8 | 14.2 | 351.5 | 24.4 | 24.2 | 23.4 | 15.4 | -0.99 | 0.00 | 0.75 |
| 77 | 6 | 24 | 15 | 15.2 | 350.8 | 18.5 | 318.0 | 20.0 | 346.5 | 20.3 | 20.4 | 20.7 | 17.3 | 0.37 | 0.48 | 0.22 |
| 77 | 6 | 24 | 16 | 12.2 | 320.3 | 14.7 | 292.0 | 15.8 | 324.6 | 22.4 | 22.6 | 22.3 | 16.3 | -0.13 | 0.48 | 0.42 |
| 77 | 6 | 24 | 17 | 12.6 | 415.1 | 14.4 | 389.2 | 15.5 | 415.8 | 22.9 | 22.9 | 22.4 | 15.9 | -0.43 | 0.48 | 0.30 |
| 77 | 6 | 24 | 18 | 11.1 | 184.7 | 13.6 | 158.1 | 14.6 | 181.6 | 21.0 | 21.0 | 20.6 | 16.5 | -0.42 | 0.48 | 0.31 |
| 77 | 6 | 24 | 19 | 8.3 | 384.0 | 9.7 | 365.8 | 10.4 | 393.4 | 21.4 | 21.6 | 21.2 | 16.3 | -0.27 | 0.48 | 0.05 |
| 77 | 6 | 24 | 20 | 9.0 | 284.3 | 9.5 | 254.4 | 10.3 | 269.0 | 19.8 | 20.5 | 20.6 | 17.3 | 0.80 | 0.48 | 0.01 |
| 77 | 6 | 24 | 21 | 9.7 | 336.8 | 11.8 | 319.3 | 13.5 | 351.0 | 19.2 | 19.8 | 19.7 | 17.5 | 0.51 | 0.48 | 0.00 |
| 77 | 6 | 24 | 22 | 6.0 | 319.2 | 6.9 | 315.2 | 7.8 | 355.9 | 19.2 | 19.8 | 20.0 | 17.5 | 0.82 | 0.48 | 0.00 |
| 77 | 6 | 24 | 23 | 4.2 | 269.3 | 3.6 | 277.5 | 3.5 | 346.1 | 18.3 | 18.4 | 18.9 | 17.8 | 0.64 | 0.48 | 0.00 |
| 77 | 6 | 24 | 24 | 4.6 | 262.1 | 5.9 | 233.8 | 8.6 | 246.1 | 18.0 | 18.3 | 18.8 | 18.0 | 0.73 | 0.48 | 0.00 |
| 77 | 6 | 25 | 1 | 10.1 | 276.9 | 11.8 | 247.7 | 12.5 | 265.5 | 18.7 | 19.3 | 19.6 | 17.6 | 0.89 | 0.48 | 0.00 |
| 77 | 6 | 25 | 2 | 3.0 | 240.6 | 3.2 | 267.0 | 4.2 | 283.5 | 16.7 | 17.1 | 17.9 | 18.4 | 1.17 | 0.48 | 0.00 |
| 77 | 6 | 25 | 3 | 2.5 | 164.0 | 2.5 | 59.5 | 3.1 | 406.9 | 16.8 | 16.6 | 17.9 | 18.8 | 1.07 | 0.48 | 0.00 |
| 77 | 6 | 25 | 4 | 2.6 | 259.3 | 2.2 | 214.2 | 2.4 | 208.6 | 16.5 | 15.9 | 17.3 | 19.1 | 0.82 | 0.48 | 0.00 |
| 77 | 6 | 25 | 5 | 5.6 | 266.8 | 5.9 | 266.9 | 6.1 | 300.9 | 17.2 | 17.1 | 18.2 | 18.6 | 0.96 | 0.48 | 0.03 |
| 77 | 6 | 25 | 6 | 5.3 | 215.0 | 6.5 | 209.0 | 7.9 | 253.3 | 18.0 | 18.7 | 18.3 | 17.4 | 0.30 | 0.48 | 0.18 |
| 77 | 6 | 25 | 7 | 4.6 | 223.5 | 5.1 | 200.3 | 5.7 | 237.5 | 19.5 | 19.9 | 19.2 | 16.5 | -0.33 | 0.48 | 0.46 |
| 77 | 6 | 25 | 8 | 8.4 | 309.7 | 9.6 | 279.8 | 10.2 | 305.0 | 21.3 | 21.1 | 20.5 | 16.3 | -0.84 | 0.48 | 0.75 |
| 77 | 6 | 25 | 9 | 7.8 | 315.2 | 8.9 | 265.8 | 9.6 | 317.5 | 22.2 | 21.9 | 21.3 | 16.2 | -0.91 | 0.48 | 1.00 |
| 77 | 6 | 25 | 10 | 10.8 | 321.8 | 12.0 | 288.7 | 12.9 | 316.9 | 23.2 | 22.7 | 22.1 | 15.9 | -1.04 | 0.48 | 1.22 |
| 77 | 6 | 25 | 11 | 10.8 | 339.9 | 11.8 | 304.4 | 12.8 | 334.1 | 24.1 | 23.6 | 23.0 | 15.5 | -1.18 | 0.48 | 1.34 |
| 77 | 6 | 25 | 12 | 10.3 | 346.5 | 11.2 | 307.9 | 11.8 | 342.4 | 24.7 | 24.2 | 23.5 | 15.1 | -1.19 | 0.48 | 1.50 |
| 77 | 6 | 25 | 13 | 8.5 | 378.4 | 9.5 | 335.4 | 10.1 | 369.0 | 25.5 | 25.2 | 24.4 | 14.7 | -1.09 | 0.48 | 1.24 |

PIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 6 | 25 | 14 | 7.6 | 321.1 | 8.3 | 293.1 | 9.0 | 321.8 | 26.2 | 26.1 | 25.2 | 14.1 | -0.99 | 0.48 | 1.23 |
| 77 | 6 | 25 | 15 | 7.1 | 317.8 | 8.2 | 285.0 | 9.2 | 318.3 | 26.1 | 26.2 | 25.3 | 14.6 | -0.83 | 0.48 | 0.55 |
| 77 | 6 | 25 | 16 | 14.7 | 289.3 | 16.8 | 250.2 | 19.3 | 283.8 | 25.1 | 24.8 | 24.2 | 15.4 | -0.83 | 0.48 | 0.48 |
| 77 | 6 | 25 | 17 | 11.7 | 365.9 | 13.9 | 331.7 | 16.1 | 363.9 | 23.0 | 23.1 | 22.4 | 16.1 | -0.63 | 0.48 | 0.17 |
| 77 | 6 | 25 | 18 | 14.2 | 57.6 | 17.1 | 27.4 | 18.6 | 59.6 | 20.5 | 20.8 | 20.6 | 17.2 | 0.04 | 0.48 | 0.04 |
| 77 | 6 | 25 | 19 | 6.3 | 389.9 | 8.3 | 367.6 | 10.2 | 47.5 | 20.7 | 21.1 | 21.2 | 17.2 | 0.58 | 0.48 | 0.02 |
| 77 | 6 | 25 | 20 | 9.4 | 265.0 | 9.3 | 233.2 | 8.5 | 295.4 | 20.6 | 21.2 | 21.1 | 17.0 | 0.55 | 0.48 | 0.01 |
| 77 | 6 | 25 | 21 | 11.1 | 283.5 | 12.5 | 252.7 | 13.6 | 282.3 | 21.3 | 22.4 | 22.4 | 16.6 | 1.11 | 0.48 | 0.00 |
| 77 | 6 | 25 | 22 | 8.9 | 244.8 | 11.3 | 216.5 | 14.1 | 251.3 | 20.7 | 21.0 | 20.9 | 16.8 | 0.27 | 0.48 | 0.00 |
| 77 | 6 | 25 | 23 | 4.4 | 221.5 | 5.3 | 189.4 | 6.5 | 220.4 | 20.0 | 20.0 | 19.9 | 17.2 | -0.04 | 0.48 | 0.00 |
| 77 | 6 | 25 | 24 | 8.5 | 200.3 | 12.1 | 170.0 | 13.9 | 206.6 | 18.5 | 18.7 | 18.5 | 17.7 | -0.02 | 0.48 | 0.00 |
| 77 | 6 | 26 | 1 | 12.3 | 228.5 | 16.7 | 195.3 | 19.5 | 228.8 | 18.1 | 18.4 | 18.1 | 17.8 | -0.05 | 0.48 | 0.00 |
| 77 | 6 | 26 | 2 | 8.0 | 243.5 | 10.3 | 211.8 | 14.4 | 247.9 | 18.3 | 18.4 | 18.2 | 17.7 | -0.13 | 0.48 | 0.00 |
| 77 | 6 | 26 | 3 | 11.2 | 273.1 | 12.2 | 229.6 | 19.6 | 259.8 | 18.4 | 18.5 | 18.3 | 17.7 | -0.17 | 0.48 | 0.00 |
| 77 | 6 | 26 | 4 | 11.1 | 287.2 | 12.9 | 246.8 | 17.2 | 275.7 | 18.3 | 18.5 | 18.2 | 17.7 | -0.10 | 0.48 | 0.00 |
| 77 | 6 | 26 | 5 | 12.1 | 303.3 | 16.2 | 267.8 | 20.0 | 308.5 | 18.3 | 18.8 | 18.8 | 17.7 | 0.56 | 0.48 | 0.02 |
| 77 | 6 | 26 | 6 | 5.1 | 180.7 | 6.3 | 356.4 | 7.5 | 386.1 | 18.2 | 18.7 | 18.3 | 17.5 | 0.08 | 0.48 | 0.16 |
| 77 | 6 | 26 | 7 | 3.4 | 96.5 | 3.5 | 52.5 | 3.6 | 43.4 | 19.7 | 20.6 | 19.5 | 16.1 | -0.26 | 0.48 | 0.45 |
| 77 | 6 | 26 | 8 | 5.4 | 390.1 | 5.9 | 360.0 | 6.0 | 385.7 | 21.9 | 22.0 | 21.2 | 15.6 | -0.74 | 0.48 | 0.74 |
| 77 | 6 | 26 | 9 | 8.2 | 377.0 | 8.9 | 347.3 | 9.6 | 379.4 | 22.8 | 22.5 | 21.8 | 15.9 | -0.99 | 0.48 | 1.00 |
| 77 | 6 | 26 | 10 | 9.0 | 22.8 | 9.7 | 352.3 | 10.1 | 22.2 | 23.1 | 23.0 | 22.2 | 15.8 | -0.96 | 0.48 | 1.24 |
| 77 | 6 | 26 | 11 | 9.0 | 353.0 | 9.4 | 325.6 | 9.8 | 355.4 | 23.9 | 23.7 | 22.8 | 15.4 | -1.12 | 0.48 | 1.35 |
| 77 | 6 | 26 | 12 | 7.4 | 325.3 | 7.8 | 299.8 | 8.3 | 325.6 | 25.0 | 24.8 | 23.9 | 14.8 | -1.14 | 0.48 | 1.51 |
| 77 | 6 | 26 | 13 | 8.3 | 311.8 | 8.8 | 292.3 | 9.5 | 323.6 | 25.8 | 25.4 | 24.6 | 14.5 | -1.18 | 0.48 | 1.42 |
| 77 | 6 | 26 | 14 | 9.6 | 352.5 | 10.2 | 322.8 | 10.6 | 345.8 | 26.1 | 25.7 | 25.0 | 14.5 | -1.12 | 0.48 | 1.38 |
| 77 | 6 | 26 | 15 | 8.2 | 323.0 | 8.8 | 295.5 | 9.7 | 325.1 | 26.2 | 26.1 | 25.3 | 14.8 | -0.90 | 0.48 | 0.84 |
| 77 | 6 | 26 | 16 | 9.6 | 313.9 | 10.6 | 286.9 | 11.6 | 313.6 | 26.8 | 26.8 | 25.8 | 14.8 | -1.04 | 0.48 | 0.90 |
| 77 | 6 | 26 | 17 | 12.6 | 317.6 | 14.2 | 289.9 | 14.9 | 316.0 | 26.8 | 26.6 | 25.8 | 15.4 | -1.06 | 0.48 | 0.70 |
| 77 | 6 | 26 | 18 | 22.0 | 336.8 | 25.2 | 307.8 | 27.1 | 333.9 | 25.2 | 24.9 | 24.4 | 16.5 | -0.89 | 0.48 | 0.41 |
| 77 | 6 | 26 | 19 | 16.3 | 330.3 | 19.5 | 301.3 | 21.6 | 327.9 | 22.9 | 22.9 | 22.4 | 17.4 | -0.50 | 0.48 | 0.11 |
| 77 | 6 | 26 | 20 | 11.9 | 318.3 | 15.5 | 284.0 | 18.2 | 313.8 | 21.3 | 21.7 | 21.4 | 18.0 | 0.16 | 0.48 | 0.02 |
| 77 | 6 | 26 | 21 | 10.1 | 273.8 | 12.7 | 256.1 | 15.1 | 293.2 | 20.0 | 20.9 | 20.8 | 18.3 | 0.77 | 0.48 | 0.01 |
| 77 | 6 | 26 | 22 | 7.4 | 231.0 | 10.2 | 245.3 | 13.3 | 283.5 | 19.8 | 20.3 | 20.4 | 18.5 | 0.64 | 0.48 | 0.01 |
| 77 | 6 | 26 | 23 | 8.6 | 274.7 | 11.4 | 262.1 | 15.1 | 296.1 | 19.8 | 20.1 | 20.3 | 18.6 | 0.53 | 0.48 | 0.01 |
| 77 | 6 | 26 | 24 | 13.2 | 293.5 | 16.7 | 267.7 | 19.7 | 302.2 | 20.0 | 20.6 | 20.7 | 18.3 | 0.63 | 0.48 | 0.01 |
| 77 | 6 | 27 | 1 | 12.6 | 282.4 | 16.3 | 258.4 | 19.5 | 290.4 | 19.9 | 20.3 | 20.3 | 18.3 | 0.44 | 0.48 | 0.01 |
| 77 | 6 | 27 | 2 | 12.0 | 278.5 | 15.1 | 248.0 | 18.4 | 270.6 | 19.5 | 19.9 | 19.9 | 18.4 | 0.34 | 0.48 | 0.01 |
| 77 | 6 | 27 | 3 | 9.2 | 283.4 | 10.1 | 246.2 | 13.3 | 265.0 | 19.4 | 19.7 | 19.5 | 18.5 | 0.12 | 0.48 | 0.01 |
| 77 | 6 | 27 | 4 | 11.3 | 273.7 | 14.3 | 246.5 | 16.7 | 271.3 | 19.3 | 19.9 | 20.1 | 18.5 | 0.81 | 0.48 | 0.01 |
| 77 | 6 | 27 | 5 | 10.0 | 280.8 | 13.4 | 256.5 | 17.2 | 285.1 | 19.0 | 19.6 | 19.8 | 18.6 | 0.75 | 0.48 | 0.02 |
| 77 | 6 | 27 | 6 | 4.9 | 240.6 | 6.1 | 213.0 | 7.8 | 314.1 | 18.2 | 18.4 | 18.2 | 18.8 | 0.02 | 0.48 | 0.13 |
| 77 | 6 | 27 | 7 | 5.1 | 316.1 | 5.7 | 256.0 | 7.7 | 271.8 | 20.6 | 20.8 | 20.1 | 17.5 | -0.46 | 0.48 | 0.45 |
| 77 | 6 | 27 | 8 | 10.4 | 294.3 | 11.4 | 264.3 | 12.3 | 291.0 | 22.0 | 21.7 | 21.0 | 17.4 | -1.00 | 0.48 | 0.74 |
| 77 | 6 | 27 | 9 | 10.1 | 295.2 | 10.6 | 264.8 | 10.9 | 288.3 | 22.9 | 22.7 | 21.9 | 17.2 | -1.02 | 0.48 | 1.00 |
| 77 | 6 | 27 | 10 | 8.8 | 315.9 | 9.6 | 283.4 | 10.2 | 305.3 | 23.6 | 23.3 | 22.6 | 16.8 | -0.99 | 0.48 | 1.01 |
| 77 | 6 | 27 | 11 | 9.0 | 297.0 | 9.8 | 261.4 | 10.6 | 289.7 | 24.6 | 24.3 | 23.6 | 15.7 | -1.07 | 0.48 | 1.34 |
| 77 | 6 | 27 | 12 | 10.5 | 313.7 | 11.8 | 282.5 | 12.8 | 307.3 | 25.0 | 24.5 | 24.0 | 15.8 | -1.01 | 0.48 | 0.92 |
| 77 | 6 | 27 | 13 | 14.6 | 308.1 | 16.7 | 279.3 | 17.8 | 305.3 | 26.6 | 25.5 | 25.2 | 15.2 | -1.44 | 0.48 | 1.40 |
| 77 | 6 | 27 | 14 | 15.3 | 303.3 | 17.3 | 274.7 | 19.0 | 301.1 | 27.2 | 26.1 | 25.9 | 15.2 | -1.36 | 0.48 | 1.34 |
| 77 | 6 | 27 | 15 | 16.8 | 320.7 | 18.8 | 291.8 | 20.1 | 318.8 | 27.1 | 26.0 | 25.7 | 15.5 | -1.34 | 0.48 | 1.06 |
| 77 | 6 | 27 | 16 | 13.8 | 312.3 | 15.8 | 282.8 | 17.1 | 309.1 | 27.0 | 26.3 | 25.9 | 15.7 | -1.13 | 0.48 | 0.81 |
| 77 | 6 | 27 | 17 | 11.8 | 304.9 | 13.5 | 276.1 | 14.9 | 300.7 | 27.0 | 26.7 | 26.0 | 15.6 | -1.02 | 0.48 | 0.61 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 27 | 18 | 13.3 | 330.4 | 15.1 | 300.8 | 16.6 | 327.6 | 26.5 | 26.3 | 25.8 | 16.1 | -0.65 | 0.48 | 0.27 |
| 77 | 6 | 27 | 19 | 14.6 | 333.8 | 17.2 | 305.4 | 19.4 | 330.6 | 25.8 | 26.0 | 25.4 | 16.2 | -0.38 | 0.48 | 0.10 |
| 77 | 6 | 27 | 20 | 14.5 | 324.5 | 17.7 | 296.8 | 20.1 | 324.0 | 24.4 | 24.8 | 24.4 | 16.5 | 0.05 | 0.48 | 0.01 |
| 77 | 6 | 27 | 21 | 13.5 | 308.9 | 17.3 | 282.4 | 20.2 | 312.3 | 22.8 | 23.4 | 23.2 | 16.8 | 0.40 | 0.48 | 0.00 |
| 77 | 6 | 27 | 22 | 13.1 | 292.8 | 16.0 | 266.2 | 18.9 | 295.1 | 21.9 | 22.3 | 22.0 | 17.0 | 0.07 | 0.48 | 0.00 |
| 77 | 6 | 27 | 23 | 5.1 | 356.7 | 6.9 | 333.8 | 8.5 | 357.0 | 20.4 | 20.9 | 20.9 | 17.6 | 0.46 | 0.48 | 0.00 |
| 77 | 6 | 27 | 24 | 4.0 | 327.1 | 4.0 | 335.1 | 4.9 | 397.0 | 20.0 | 20.0 | 20.3 | 17.9 | 0.31 | 0.48 | 0.00 |
| 77 | 6 | 28 | 1 | 3.4 | 335.3 | 3.3 | 345.1 | 4.3 | 53.9 | 19.4 | 19.2 | 19.5 | 18.2 | 0.14 | 0.48 | 0.00 |
| 77 | 6 | 28 | 2 | 5.9 | 332.7 | 6.5 | 339.4 | 8.2 | 39.2 | 17.5 | 18.1 | 18.6 | 18.8 | 1.09 | 0.48 | 0.00 |
| 77 | 6 | 28 | 3 | 4.5 | 319.5 | 4.8 | 319.4 | 5.7 | 27.4 | 17.3 | 17.5 | 18.0 | 19.0 | 0.69 | 0.48 | 0.00 |
| 77 | 6 | 28 | 4 | 3.7 | 323.5 | 3.3 | 341.3 | 4.5 | 63.8 | 16.8 | 16.8 | 17.3 | 19.3 | 0.52 | 0.48 | 0.00 |
| 77 | 6 | 28 | 5 | 3.4 | 295.2 | 2.1 | 366.3 | 3.2 | 98.0 | 16.6 | 15.8 | 17.1 | 19.4 | 0.54 | 0.48 | 0.02 |
| 77 | 6 | 28 | 6 | 2.3 | 206.0 | 2.4 | 145.5 | 3.3 | 131.5 | 16.7 | 16.5 | 16.7 | 19.2 | 0.01 | 0.48 | 0.13 |
| 77 | 6 | 28 | 7 | 1.9 | 199.5 | 1.9 | 156.8 | 2.3 | 146.5 | 17.3 | 17.9 | 16.9 | 18.0 | -0.40 | 0.48 | 0.34 |
| 77 | 6 | 28 | 8 | 3.8 | 141.2 | 4.1 | 108.4 | 4.3 | 124.2 | 18.8 | 19.4 | 18.3 | 16.9 | -0.56 | 0.48 | 0.68 |
| 77 | 6 | 28 | 9 | 5.3 | 120.0 | 5.6 | 87.8 | 6.1 | 105.2 | 20.0 | 20.2 | 19.3 | 16.9 | -0.71 | 0.48 | 0.91 |
| 77 | 6 | 28 | 10 | 4.9 | 130.7 | 5.1 | 109.4 | 5.5 | 128.8 | 21.5 | 21.7 | 20.7 | 16.6 | -0.78 | 0.48 | 1.12 |
| 77 | 6 | 28 | 11 | 5.7 | 316.7 | 6.2 | 298.1 | 6.7 | 334.1 | 23.2 | 23.1 | 22.3 | 16.2 | -0.86 | 0.48 | 1.31 |
| 77 | 6 | 28 | 12 | 7.9 | 254.9 | 8.6 | 224.4 | 8.8 | 255.6 | 24.4 | 23.9 | 23.4 | 16.1 | -1.07 | 0.48 | 1.41 |
| 77 | 6 | 28 | 13 | 8.8 | 296.0 | 9.5 | 266.8 | 9.9 | 290.6 | 24.8 | 24.2 | 23.8 | 16.1 | -0.96 | 0.48 | 1.13 |
| 77 | 6 | 28 | 14 | 8.2 | 289.9 | 8.9 | 263.6 | 9.6 | 291.1 | 25.9 | 25.3 | 24.8 | 15.6 | -1.09 | 0.48 | 1.36 |
| 77 | 6 | 28 | 15 | 11.4 | 321.0 | 12.5 | 291.1 | 13.3 | 313.7 | 26.3 | 25.5 | 25.1 | 15.7 | -1.17 | 0.48 | 1.19 |
| 77 | 6 | 28 | 16 | 12.7 | 328.7 | 14.3 | 301.5 | 15.2 | 326.5 | 26.3 | 26.0 | 25.2 | 15.8 | -1.13 | 0.48 | 0.95 |
| 77 | 6 | 28 | 17 | 14.4 | 328.2 | 16.2 | 300.5 | 17.1 | 326.2 | 26.3 | 25.9 | 25.3 | 16.0 | -0.98 | 0.48 | 0.67 |
| 77 | 6 | 28 | 18 | 15.6 | 326.0 | 18.4 | 297.7 | 19.9 | 323.2 | 25.9 | 25.8 | 25.0 | 16.2 | -0.81 | 0.48 | 0.39 |
| 77 | 6 | 28 | 19 | 11.5 | 323.6 | 13.8 | 295.9 | 15.5 | 322.3 | 25.0 | 25.9 | 24.7 | 16.5 | -0.32 | 0.48 | 0.11 |
| 77 | 6 | 28 | 20 | 8.1 | 308.3 | 10.0 | 295.1 | 11.7 | 325.6 | 23.2 | 24.1 | 24.0 | 17.4 | 0.77 | 0.48 | 0.01 |
| 77 | 6 | 28 | 21 | 10.9 | 304.4 | 13.5 | 286.7 | 15.1 | 318.2 | 22.7 | 23.4 | 23.4 | 17.5 | 0.71 | 0.48 | 0.00 |
| 77 | 6 | 28 | 22 | 12.0 | 304.0 | 15.6 | 286.1 | 18.1 | 316.9 | 20.9 | 22.0 | 22.2 | 18.0 | 1.31 | 0.48 | 0.00 |
| 77 | 6 | 28 | 23 | 13.8 | 299.8 | 16.1 | 277.8 | 21.2 | 309.3 | 20.4 | 21.2 | 21.3 | 18.0 | 0.88 | 0.48 | 0.00 |
| 77 | 6 | 28 | 24 | 12.2 | 300.7 | 16.1 | 281.3 | 19.3 | 314.1 | 19.3 | 20.2 | 20.4 | 18.3 | 1.09 | 0.48 | 0.00 |
| 77 | 6 | 29 | 1 | 11.2 | 297.4 | 15.2 | 276.1 | 18.7 | 308.4 | 18.9 | 19.6 | 19.8 | 18.5 | 0.98 | 0.48 | 0.00 |
| 77 | 6 | 29 | 2 | 5.8 | 235.9 | 7.3 | 208.3 | 9.1 | 229.8 | 18.1 | 18.4 | 18.6 | 18.9 | 0.45 | 0.48 | 0.00 |
| 77 | 6 | 29 | 3 | 3.6 | 281.3 | 3.4 | 240.8 | 3.5 | 242.6 | 17.5 | 17.3 | 18.0 | 19.3 | 0.41 | 0.48 | 0.00 |
| 77 | 6 | 29 | 4 | 3.2 | 251.8 | 2.5 | 224.6 | 2.1 | 223.3 | 17.3 | 16.4 | 17.6 | 19.4 | 0.29 | 0.48 | 0.00 |
| 77 | 6 | 29 | 5 | 5.3 | 311.9 | 4.4 | 300.3 | 3.9 | 334.0 | 17.1 | 17.2 | 17.7 | 19.4 | 0.62 | 0.48 | 0.01 |
| 77 | 6 | 29 | 6 | 3.4 | 333.7 | 3.6 | 307.8 | 4.0 | 358.5 | 17.7 | 18.2 | 17.6 | 18.4 | -0.07 | 0.48 | 0.20 |
| 77 | 6 | 29 | 7 | 4.8 | 108.8 | 5.2 | 80.8 | 5.6 | 105.2 | 18.6 | 19.2 | 18.2 | 17.3 | -0.46 | 0.48 | 0.51 |
| 77 | 6 | 29 | 8 | 6.2 | 113.3 | 6.9 | 86.3 | 7.8 | 113.8 | 19.5 | 19.6 | 18.8 | 17.3 | -0.70 | 0.48 | 0.63 |
| 77 | 6 | 29 | 9 | 5.3 | 146.0 | 5.8 | 119.0 | 6.1 | 151.7 | 20.5 | 20.6 | 19.8 | 17.2 | -0.66 | 0.48 | 0.84 |
| 77 | 6 | 29 | 10 | 5.0 | 80.4 | 5.3 | 422.6 | 5.5 | 92.3 | 21.9 | 22.1 | 21.2 | 16.4 | -0.75 | 0.48 | 0.89 |
| 77 | 6 | 29 | 11 | 7.0 | 225.5 | 7.7 | 195.6 | 8.2 | 224.9 | 23.3 | 23.0 | 22.4 | 16.3 | -0.96 | 0.48 | 1.13 |
| 77 | 6 | 29 | 12 | 10.6 | 269.4 | 11.9 | 237.6 | 13.3 | 265.8 | 24.4 | 23.7 | 23.3 | 16.4 | -1.18 | 0.48 | 1.19 |
| 77 | 6 | 29 | 13 | 14.2 | 294.5 | 16.0 | 266.8 | 17.5 | 293.8 | 25.0 | 24.2 | 23.8 | 16.3 | -1.20 | 0.48 | 1.33 |
| 77 | 6 | 29 | 14 | 14.4 | 321.1 | 16.3 | 292.0 | 17.8 | 315.7 | 25.7 | 24.9 | 24.4 | 16.0 | -1.30 | 0.48 | 1.16 |
| 77 | 6 | 29 | 15 | 15.3 | 308.2 | 17.4 | 279.0 | 19.0 | 303.5 | 26.4 | 25.4 | 25.2 | 15.6 | -1.14 | 0.48 | 1.03 |
| 77 | 6 | 29 | 16 | 16.1 | 320.9 | 18.3 | 291.1 | 19.8 | 316.2 | 26.4 | 25.6 | 25.3 | 15.5 | -1.08 | 0.48 | 0.85 |
| 77 | 6 | 29 | 17 | 15.1 | 305.5 | 17.4 | 277.8 | 19.1 | 303.8 | 26.8 | 26.2 | 25.8 | 15.2 | -1.02 | 0.48 | 0.69 |
| 77 | 6 | 29 | 18 | 15.3 | 322.6 | 18.0 | 294.6 | 19.9 | 320.7 | 26.2 | 26.0 | 25.4 | 15.4 | -0.80 | 0.48 | 0.40 |
| 77 | 6 | 29 | 19 | 17.0 | 329.9 | 20.0 | 301.4 | 21.9 | 327.3 | 24.6 | 25.0 | 24.2 | 16.1 | -0.38 | 0.48 | 0.11 |
| 77 | 6 | 29 | 20 | 14.7 | 323.6 | 18.4 | 295.5 | 20.9 | 322.6 | 22.7 | 23.1 | 22.8 | 16.9 | 0.12 | 0.48 | 0.01 |
| 77 | 6 | 29 | 21 | 13.8 | 315.8 | 17.6 | 290.3 | 20.5 | 319.1 | 21.1 | 21.7 | 21.5 | 17.4 | 0.44 | 0.48 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 6 | 29 | 22 | 19.0 | 296.8 | 23.3 | 269.5 | 26.5 | 298.8 | 20.1 | 20.6 | 20.2 | 17.8 | 0.13 | 0.24 | 0.00 |
| 77 | 6 | 29 | 23 | 14.3 | 305.0 | 18.0 | 279.2 | 21.1 | 308.6 | 18.5 | 19.2 | 19.2 | 18.6 | 0.72 | 0.00 | 0.00 |
| 77 | 6 | 29 | 24 | 10.2 | 306.8 | 12.0 | 293.1 | 11.5 | 336.4 | 17.5 | 18.8 | 19.1 | 19.0 | 1.54 | 0.00 | 0.00 |
| 77 | 6 | 30 | 1 | 8.2 | 304.1 | 8.3 | 295.4 | 7.7 | 343.1 | 18.0 | 18.6 | 18.8 | 18.9 | 0.78 | 0.00 | 0.00 |
| 77 | 6 | 30 | 2 | 7.8 | 315.7 | 8.2 | 311.8 | 8.4 | 360.4 | 17.1 | 18.1 | 18.5 | 19.2 | 1.40 | 0.00 | 0.00 |
| 77 | 6 | 30 | 3 | 6.3 | 317.2 | 5.4 | 307.8 | 4.3 | 355.4 | 17.4 | 17.7 | 17.9 | 19.2 | 0.50 | 0.00 | 0.00 |
| 77 | 6 | 30 | 4 | 4.9 | 321.8 | 3.7 | 311.8 | 4.1 | 111.2 | 16.1 | 16.2 | 16.9 | 19.7 | 0.77 | 0.00 | 0.00 |
| 77 | 6 | 30 | 5 | 3.9 | 253.6 | 3.8 | 203.6 | 4.7 | 209.8 | 16.2 | 16.3 | 16.6 | 19.6 | 0.41 | 0.00 | 0.02 |
| 77 | 6 | 30 | 6 | 3.5 | 224.4 | 4.6 | 194.5 | 6.1 | 210.8 | 16.6 | 16.9 | 16.6 | 19.0 | 0.03 | 0.00 | 0.21 |
| 77 | 6 | 30 | 7 | 4.9 | 190.8 | 5.5 | 164.5 | 5.6 | 186.1 | 17.9 | 18.1 | 17.3 | 17.9 | -0.61 | 0.00 | 0.47 |
| 77 | 6 | 30 | 8 | 6.1 | 134.5 | 6.8 | 105.3 | 7.3 | 136.7 | 19.2 | 19.3 | 18.5 | 17.2 | -0.63 | 0.00 | 0.75 |
| 77 | 6 | 30 | 9 | 6.4 | 172.0 | 7.0 | 145.4 | 7.8 | 174.0 | 20.5 | 20.4 | 19.7 | 17.1 | -0.74 | 0.00 | 0.97 |
| 77 | 6 | 30 | 10 | 9.7 | 293.7 | 10.9 | 283.0 | 11.9 | 288.6 | 22.1 | 21.4 | 20.9 | 16.8 | -1.20 | 0.00 | 1.23 |
| 77 | 6 | 30 | 11 | 9.9 | 299.0 | 11.0 | 270.4 | 11.8 | 296.3 | 23.1 | 22.4 | 21.9 | 16.3 | -1.24 | 0.00 | 1.38 |
| 77 | 6 | 30 | 12 | 11.3 | 303.2 | 12.6 | 272.6 | 13.5 | 296.7 | 24.0 | 23.1 | 22.8 | 15.9 | -1.22 | 0.00 | 1.45 |
| 77 | 6 | 30 | 13 | 11.4 | 306.8 | 12.7 | 278.0 | 13.9 | 303.7 | 25.0 | 24.0 | 23.8 | 15.5 | -1.26 | 0.00 | 1.42 |
| 77 | 6 | 30 | 14 | 11.3 | 302.3 | 12.5 | 273.5 | 13.9 | 300.6 | 25.7 | 24.9 | 24.4 | 15.3 | -1.23 | 0.00 | 1.33 |
| 77 | 6 | 30 | 15 | 13.1 | 305.6 | 14.7 | 274.4 | 16.2 | 297.3 | 26.3 | 25.4 | 25.0 | 15.1 | -1.27 | 0.00 | 1.18 |
| 77 | 6 | 30 | 16 | 13.3 | 328.1 | 15.0 | 298.3 | 16.4 | 324.4 | 26.4 | 25.6 | 25.2 | 15.1 | -1.22 | 0.00 | 0.94 |
| 77 | 6 | 30 | 17 | 13.2 | 333.6 | 15.0 | 303.1 | 16.5 | 329.0 | 26.3 | 25.8 | 25.3 | 15.2 | -1.07 | 0.00 | 0.67 |
| 77 | 6 | 30 | 18 | 12.2 | 348.5 | 13.9 | 317.3 | 14.9 | 341.5 | 25.9 | 25.7 | 25.2 | 15.3 | -0.77 | 0.00 | 0.39 |
| 77 | 6 | 30 | 19 | 11.3 | 337.8 | 13.5 | 308.5 | 15.1 | 335.4 | 25.1 | 25.5 | 24.8 | 15.6 | -0.35 | 0.00 | 0.10 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 1 | 16 | 15.6 | 234.4 | 19.3 | 213.8 | 28.4 | 243.2 | 22.9 | 22.2 | 21.8 | 16.7 | -1.14 | 0.00 | 0.61 |
| 77 | 7 | 1 | 17 | 15.6 | 254.1 | 20.7 | 208.3 | 26.1 | 252.2 | 23.4 | 23.3 | 22.7 | 16.4 | -0.70 | 0.00 | 0.18 |
| 77 | 7 | 1 | 18 | 12.8 | 256.8 | 15.6 | 224.0 | 21.5 | 252.0 | 23.0 | 23.0 | 22.4 | 16.7 | -0.58 | 0.00 | 0.12 |
| 77 | 7 | 1 | 19 | 27.4 | 296.6 | 32.5 | 268.7 | 37.0 | 297.3 | 18.9 | 19.0 | 18.2 | 18.5 | -0.67 | 0.00 | 0.04 |
| 77 | 7 | 1 | 20 | 23.5 | 299.1 | 27.7 | 270.9 | 31.1 | 299.2 | 17.7 | 17.8 | 17.2 | 19.2 | -0.46 | 0.00 | 0.01 |
| 77 | 7 | 1 | 21 | 13.8 | 283.6 | 16.7 | 256.6 | 19.3 | 288.1 | 17.0 | 17.2 | 16.8 | 19.5 | -0.18 | 0.00 | 0.01 |
| 77 | 7 | 1 | 22 | 7.9 | 261.0 | 9.7 | 228.3 | 10.6 | 250.8 | 16.7 | 17.1 | 17.1 | 19.6 | 0.44 | 0.00 | 0.01 |
| 77 | 7 | 1 | 23 | 5.1 | 257.3 | 5.8 | 229.4 | 7.0 | 248.6 | 17.1 | 17.5 | 17.6 | 19.3 | 0.44 | 0.00 | 0.01 |
| 77 | 7 | 1 | 24 | 2.6 | 257.9 | 4.2 | 201.6 | 7.2 | 228.8 | 16.6 | 16.7 | 17.1 | 19.8 | 0.55 | 0.00 | 0.00 |
| 77 | 7 | 2 | 1 | 6.5 | 266.1 | 7.4 | 231.0 | 12.2 | 252.8 | 17.5 | 17.6 | 17.3 | 19.1 | -0.11 | 0.00 | 0.00 |
| 77 | 7 | 2 | 2 | 9.2 | 281.8 | 11.1 | 244.7 | 15.0 | 267.0 | 17.3 | 17.5 | 17.2 | 19.2 | -0.02 | 0.00 | 0.00 |
| 77 | 7 | 2 | 3 | 22.8 | 314.4 | 27.8 | 284.6 | 31.6 | 312.9 | 14.6 | 14.7 | 14.2 | 27.5 | -0.41 | 0.00 | 0.01 |
| 77 | 7 | 2 | 4 | 15.4 | 297.5 | 18.9 | 269.7 | 22.2 | 298.9 | 12.6 | 12.8 | 12.3 | 45.3 | -0.37 | 0.00 | 0.01 |
| 77 | 7 | 2 | 5 | 9.3 | 244.5 | 12.4 | 215.8 | 15.3 | 241.6 | 12.0 | 12.4 | 12.1 | 49.1 | 0.11 | 0.00 | 0.02 |
| 77 | 7 | 2 | 6 | 5.8 | 272.1 | 6.9 | 249.8 | 8.4 | 274.5 | 13.9 | 14.6 | 14.1 | 31.4 | 0.23 | 0.00 | 0.17 |
| 77 | 7 | 2 | 7 | 3.9 | 159.6 | 3.9 | 147.2 | 5.0 | 225.9 | 16.0 | 17.0 | 15.9 | 22.3 | -0.17 | 0.00 | 0.46 |
| 77 | 7 | 2 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 2 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL. | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 7 | 3 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 3 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 4 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 7 | 5 | 12 | 16.2 | 301.0 | 18.4 | 288.2 | 19.2 | 301.3 | 18.4 | 17.6 | 17.1 | 19.1 | -1.32 | 0.00 | 1.10 |
| 77 | 7 | 5 | 13 | 9.5 | 254.9 | 10.8 | 243.1 | 12.3 | 258.1 | 20.4 | 20.0 | 19.4 | 17.3 | -1.05 | 0.00 | 1.10 |
| 77 | 7 | 5 | 14 | 17.2 | 288.1 | 19.7 | 274.8 | 20.9 | 285.9 | 18.1 | 17.3 | 17.0 | 19.0 | -1.09 | 0.00 | 0.82 |
| 77 | 7 | 5 | 15 | 9.1 | 215.5 | 10.5 | 203.9 | 11.2 | 221.2 | 19.6 | 19.1 | 18.5 | 17.9 | -1.01 | 0.00 | 0.80 |
| 77 | 7 | 5 | 16 | 10.4 | 194.8 | 12.1 | 183.9 | 13.0 | 193.1 | 21.2 | 20.8 | 20.2 | 17.2 | -1.02 | 0.00 | 0.94 |
| 77 | 7 | 5 | 17 | 22.7 | 293.2 | 26.5 | 277.4 | 29.1 | 288.8 | 17.5 | 17.0 | 16.5 | 20.0 | -0.99 | 0.00 | 0.39 |
| 77 | 7 | 5 | 18 | 19.5 | 292.5 | 22.3 | 279.1 | 24.5 | 292.2 | 16.3 | 16.1 | 15.6 | 20.3 | -0.71 | 0.00 | 0.32 |
| 77 | 7 | 5 | 19 | 11.5 | 257.1 | 14.4 | 244.5 | 17.4 | 258.9 | 16.3 | 16.5 | 16.2 | 19.9 | -0.08 | 0.00 | 0.06 |
| 77 | 7 | 5 | 20 | 7.3 | 167.1 | 8.9 | 157.6 | 9.9 | 214.1 | 15.6 | 16.1 | 16.1 | 20.2 | 0.49 | 0.00 | 0.01 |
| 77 | 7 | 5 | 21 | 2.6 | 229.0 | 2.7 | 218.4 | 3.9 | 178.5 | 14.5 | 14.1 | 14.6 | 21.1 | 0.05 | 0.00 | 0.00 |
| 77 | 7 | 5 | 22 | 3.3 | 261.4 | 2.6 | 233.9 | 2.6 | 215.6 | 14.4 | 14.0 | 14.5 | 21.1 | 0.07 | 0.00 | 0.00 |
| 77 | 7 | 5 | 23 | 5.1 | 246.6 | 5.8 | 219.9 | 6.6 | 212.5 | 14.5 | 15.0 | 15.0 | 20.7 | 0.50 | 0.00 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 7 | 5 | 24 | 5.6 | 213.5 | 7.0 | 196.4 | 8.9 | 206.3 | 15.5 | 16.0 | 15.9 | 20.3 | 0.40 | 0.00 | 0.00 |
| 77 | 7 | 6 | 1 | 4.3 | 192.6 | 5.8 | 179.5 | 6.5 | 200.0 | 15.2 | 15.6 | 15.6 | 20.4 | 0.37 | 0.00 | 0.00 |
| 77 | 7 | 6 | 2 | 2.9 | 289.5 | 3.0 | 371.0 | 3.7 | 179.4 | 14.6 | 14.7 | 15.3 | 20.9 | 0.71 | 0.00 | 0.00 |
| 77 | 7 | 6 | 3 | 2.4 | 30.2 | 3.1 | 80.0 | 2.4 | 90.1 | 14.3 | 14.3 | 15.1 | 21.6 | 0.81 | 0.00 | 0.00 |
| 77 | 7 | 6 | 4 | 3.3 | 259.9 | 4.3 | 236.3 | 5.8 | 247.9 | 14.4 | 14.2 | 14.7 | 21.7 | 0.24 | 0.00 | 0.00 |
| 77 | 7 | 6 | 5 | 4.3 | 228.6 | 5.1 | 236.8 | 7.3 | 256.0 | 14.3 | 14.5 | 14.5 | 21.5 | 0.28 | 0.00 | 0.02 |
| 77 | 7 | 6 | 6 | 2.9 | 88.3 | 3.1 | 425.3 | 3.5 | 169.5 | 14.9 | 15.5 | 14.7 | 19.9 | -0.15 | 0.00 | 0.19 |
| 77 | 7 | 6 | 7 | 4.5 | 83.2 | 4.4 | 78.1 | 4.1 | 108.0 | 16.5 | 17.1 | 16.1 | 18.8 | -0.30 | 0.00 | 0.44 |
| 77 | 7 | 6 | 8 | 6.0 | 328.0 | 6.5 | 312.9 | 6.9 | 328.5 | 18.6 | 18.8 | 17.9 | 18.0 | -0.71 | 0.00 | 0.74 |
| 77 | 7 | 6 | 9 | 8.8 | 274.4 | 9.5 | 257.9 | 10.2 | 270.5 | 20.1 | 19.7 | 19.1 | 18.0 | -1.01 | 0.00 | 1.00 |
| 77 | 7 | 6 | 10 | 10.3 | 274.2 | 11.3 | 259.3 | 12.4 | 272.1 | 20.8 | 20.3 | 19.8 | 17.5 | -1.05 | 0.00 | 1.22 |
| 77 | 7 | 6 | 11 | 12.7 | 309.0 | 13.8 | 293.1 | 14.6 | 307.2 | 21.5 | 20.7 | 20.3 | 17.3 | -1.22 | 0.00 | 1.28 |
| 77 | 7 | 6 | 12 | 12.0 | 300.5 | 13.5 | 285.8 | 14.5 | 298.5 | 20.6 | 20.3 | 19.7 | 17.7 | -0.91 | 0.00 | 0.49 |
| 77 | 7 | 6 | 13 | 10.3 | 289.6 | 11.3 | 274.8 | 12.3 | 288.7 | 20.7 | 20.4 | 19.9 | 17.6 | -0.79 | 0.00 | 0.55 |
| 77 | 7 | 6 | 14 | 11.0 | 278.9 | 12.1 | 263.3 | 13.2 | 277.4 | 21.2 | 20.9 | 20.4 | 17.4 | -0.82 | 0.00 | 0.42 |
| 77 | 7 | 6 | 15 | 11.9 | 263.5 | 13.5 | 264.7 | 15.0 | 275.4 | 20.9 | 20.7 | 20.1 | 17.6 | -0.76 | 0.00 | 0.37 |
| 77 | 7 | 6 | 16 | 10.9 | 251.9 | 12.8 | 232.3 | 14.7 | 244.8 | 23.1 | 22.7 | 22.0 | 16.5 | -1.11 | 0.00 | 0.91 |
| 77 | 7 | 6 | 17 | 9.2 | 244.5 | 10.8 | 227.9 | 12.8 | 242.4 | 23.4 | 23.1 | 22.4 | 16.3 | -0.94 | 0.00 | 0.56 |
| 77 | 7 | 6 | 18 | 7.4 | 252.0 | 8.7 | 238.9 | 10.0 | 252.6 | 23.1 | 23.1 | 22.5 | 16.5 | -0.65 | 0.00 | 0.29 |
| 77 | 7 | 6 | 19 | 7.1 | 252.3 | 8.7 | 238.9 | 10.5 | 254.1 | 22.4 | 22.6 | 22.1 | 16.8 | -0.27 | 0.00 | 0.09 |
| 77 | 7 | 6 | 20 | 7.6 | 290.9 | 7.8 | 282.8 | 8.2 | 297.2 | 21.4 | 21.9 | 21.7 | 17.6 | 0.23 | 0.00 | 0.01 |
| 77 | 7 | 6 | 21 | 8.6 | 265.8 | 8.5 | 250.8 | 8.7 | 266.4 | 21.5 | 21.8 | 21.6 | 17.5 | 0.11 | 0.00 | 0.00 |
| 77 | 7 | 6 | 22 | 8.3 | 258.5 | 7.4 | 236.6 | 6.9 | 253.2 | 21.4 | 21.7 | 21.5 | 17.4 | 0.14 | 0.00 | 0.00 |
| 77 | 7 | 6 | 23 | 5.6 | 245.8 | 4.8 | 224.0 | 4.4 | 239.8 | 21.3 | 21.4 | 21.4 | 17.5 | 0.07 | 0.00 | 0.00 |
| 77 | 7 | 6 | 24 | 5.4 | 247.9 | 4.6 | 222.5 | 4.4 | 227.9 | 21.3 | 21.3 | 21.3 | 17.5 | 0.02 | 0.00 | 0.00 |
| 77 | 7 | 7 | 1 | 6.2 | 389.7 | 8.0 | 358.9 | 10.3 | 376.9 | 16.5 | 17.2 | 17.7 | 19.1 | 1.21 | 0.00 | 0.00 |
| 77 | 7 | 7 | 2 | 3.8 | 306.1 | 3.6 | 304.1 | 4.6 | 377.7 | 16.2 | 15.8 | 16.8 | 19.8 | 0.60 | 0.00 | 0.00 |
| 77 | 7 | 7 | 3 | 2.8 | 301.4 | 2.2 | 325.1 | 3.1 | 90.9 | 17.1 | 16.1 | 17.3 | 19.3 | 0.19 | 0.00 | 0.00 |
| 77 | 7 | 7 | 4 | 4.5 | 241.5 | 4.0 | 202.6 | 4.0 | 198.5 | 17.3 | 17.2 | 17.3 | 19.1 | 0.03 | 0.00 | 0.00 |
| 77 | 7 | 7 | 5 | 4.0 | 310.6 | 3.1 | 315.5 | 2.3 | 347.7 | 17.1 | 17.2 | 17.5 | 19.2 | 0.41 | 0.00 | 0.02 |
| 77 | 7 | 7 | 6 | 3.5 | 257.0 | 2.8 | 195.6 | 3.3 | 116.0 | 17.0 | 17.3 | 17.4 | 18.8 | 0.34 | 0.00 | 0.12 |
| 77 | 7 | 7 | 7 | 3.4 | 170.5 | 3.4 | 135.3 | 3.4 | 133.9 | 17.9 | 18.4 | 17.5 | 17.8 | -0.32 | 0.00 | 0.37 |
| 77 | 7 | 7 | 8 | 4.9 | 129.4 | 5.4 | 112.5 | 5.8 | 133.5 | 19.5 | 19.8 | 18.9 | 16.7 | -0.59 | 0.00 | 0.78 |
| 77 | 7 | 7 | 9 | 5.2 | 135.3 | 5.8 | 119.6 | 6.2 | 139.0 | 21.6 | 21.7 | 20.8 | 16.4 | -0.72 | 0.00 | 0.96 |
| 77 | 7 | 7 | 10 | 7.6 | 204.5 | 8.1 | 185.2 | 8.7 | 206.2 | 23.3 | 23.0 | 22.4 | 16.0 | -0.88 | 0.00 | 1.06 |
| 77 | 7 | 7 | 11 | 8.8 | 281.0 | 9.6 | 254.6 | 10.9 | 266.9 | 24.4 | 23.7 | 23.2 | 15.9 | -1.18 | 0.00 | 1.29 |
| 77 | 7 | 7 | 12 | 10.1 | 277.2 | 11.6 | 260.6 | 13.0 | 278.0 | 24.7 | 24.1 | 23.6 | 15.9 | -1.08 | 0.00 | 1.17 |
| 77 | 7 | 7 | 13 | 9.9 | 264.3 | 11.6 | 242.6 | 12.7 | 260.3 | 24.8 | 24.3 | 23.8 | 15.9 | -1.01 | 0.00 | 0.83 |
| 77 | 7 | 7 | 14 | 10.4 | 247.6 | 12.2 | 230.8 | 14.1 | 252.9 | 24.9 | 24.5 | 24.0 | 15.9 | -0.90 | 0.00 | 0.65 |
| 77 | 7 | 7 | 15 | 13.5 | 307.9 | 14.9 | 289.1 | 15.9 | 305.5 | 24.7 | 23.9 | 23.5 | 16.1 | -1.16 | 0.00 | 0.89 |
| 77 | 7 | 7 | 16 | 9.2 | 273.0 | 10.2 | 254.6 | 11.1 | 268.9 | 25.5 | 25.1 | 24.5 | 15.4 | -1.00 | 0.00 | 0.96 |
| 77 | 7 | 7 | 17 | 11.0 | 274.8 | 12.6 | 254.6 | 14.3 | 269.8 | 25.5 | 25.1 | 24.5 | 15.5 | -0.93 | 0.00 | 0.55 |
| 77 | 7 | 7 | 18 | 11.2 | 276.0 | 13.0 | 256.9 | 14.6 | 273.3 | 24.5 | 24.5 | 23.9 | 16.1 | -0.59 | 0.00 | 0.20 |
| 77 | 7 | 7 | 19 | 9.3 | 255.4 | 11.5 | 235.2 | 13.7 | 252.4 | 23.8 | 24.0 | 23.5 | 16.1 | -0.26 | 0.00 | 0.11 |
| 77 | 7 | 7 | 20 | 7.5 | 269.1 | 7.5 | 253.9 | 7.5 | 274.3 | 23.5 | 23.8 | 23.5 | 16.4 | -0.03 | 0.00 | 0.01 |
| 77 | 7 | 7 | 21 | 4.6 | 359.4 | 6.8 | 354.6 | 9.1 | 378.4 | 20.7 | 21.3 | 21.6 | 17.4 | 0.92 | 0.00 | 0.00 |
| 77 | 7 | 7 | 22 | 2.7 | 330.2 | 3.3 | 371.4 | 5.5 | 61.3 | 19.2 | 18.7 | 19.8 | 18.3 | 0.57 | 0.00 | 0.00 |
| 77 | 7 | 7 | 23 | 4.9 | 315.3 | 4.0 | 330.5 | 5.4 | 46.6 | 19.3 | 19.2 | 19.8 | 17.9 | 0.58 | 0.00 | 0.00 |
| 77 | 7 | 7 | 24 | 6.3 | 330.3 | 8.2 | 341.8 | 11.3 | 26.7 | 17.6 | 18.7 | 19.5 | 18.3 | 1.83 | 0.00 | 0.00 |
| 77 | 7 | 8 | 1 | 4.5 | 319.4 | 6.0 | 340.2 | 9.6 | 22.5 | 16.6 | 17.1 | 17.8 | 18.9 | 1.16 | 0.00 | 0.00 |
| 77 | 7 | 8 | 2 | 5.7 | 321.1 | 5.4 | 329.0 | 5.4 | 16.8 | 17.4 | 17.8 | 18.0 | 18.6 | 0.61 | 0.00 | 0.00 |
| 77 | 7 | 8 | 3 | 4.3 | 318.5 | 4.2 | 333.0 | 3.6 | 25.1 | 17.2 | 17.4 | 17.8 | 18.8 | 0.64 | 0.00 | 0.00 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 7 | 8 | 4 | 2.3 | 382.4 | 2.6 | 374.7 | 3.4 | 67.9 | 16.3 | 15.9 | 16.7 | 19.4 | 0.42 | 0.00 | 0.00 |
| 77 | 7 | 8 | 5 | 3.3 | 204.6 | 2.9 | 172.2 | 2.7 | 176.1 | 15.4 | 14.8 | 15.6 | 19.9 | 0.16 | 0.00 | 0.02 |
| 77 | 7 | 8 | 6 | 4.7 | 240.6 | 5.5 | 216.1 | 5.8 | 217.5 | 17.2 | 17.6 | 17.2 | 18.3 | 0.03 | 0.00 | 0.19 |
| 77 | 7 | 8 | 7 | 4.1 | 157.1 | 4.6 | 141.7 | 5.3 | 160.3 | 19.3 | 19.6 | 18.7 | 16.7 | -0.54 | 0.00 | 0.42 |
| 77 | 7 | 8 | 8 | 4.7 | 86.8 | 4.9 | 73.3 | 5.6 | 98.0 | 20.2 | 20.7 | 19.7 | 16.1 | -0.57 | 0.00 | 0.74 |
| 77 | 7 | 8 | 9 | 6.7 | 95.9 | 6.9 | 80.3 | 7.6 | 104.1 | 21.7 | 21.7 | 21.0 | 16.2 | -0.73 | 0.00 | 1.01 |
| 77 | 7 | 8 | 10 | 7.9 | 105.2 | 8.8 | 87.3 | 10.0 | 105.7 | 23.7 | 23.4 | 22.8 | 15.3 | -0.84 | 0.00 | 1.04 |
| 77 | 7 | 8 | 11 | 6.3 | 347.2 | 6.9 | 332.5 | 7.6 | 348.8 | 24.2 | 24.2 | 23.5 | 15.4 | -0.72 | 0.00 | 0.48 |
| 77 | 7 | 8 | 12 | 6.4 | 324.3 | 7.1 | 308.1 | 7.7 | 324.8 | 24.8 | 24.6 | 24.0 | 15.0 | -0.78 | 0.00 | 0.76 |
| 77 | 7 | 8 | 13 | 10.5 | 223.2 | 11.9 | 207.1 | 13.6 | 227.9 | 26.0 | 25.5 | 24.9 | 14.8 | -1.02 | 0.00 | 0.93 |
| 77 | 7 | 8 | 14 | 13.9 | 230.2 | 16.7 | 211.3 | 18.3 | 233.6 | 27.4 | 26.3 | 26.1 | 14.4 | -1.38 | 0.00 | 1.34 |
| 77 | 7 | 8 | 15 | 12.6 | 231.3 | 15.4 | 212.0 | 18.0 | 233.6 | 27.6 | 26.7 | 26.3 | 14.4 | -1.30 | 0.00 | 1.70 |
| 77 | 7 | 8 | 16 | 12.5 | 247.3 | 14.8 | 226.3 | 18.3 | 247.5 | 26.7 | 26.2 | 25.8 | 14.9 | -0.93 | 0.00 | 0.53 |
| 77 | 7 | 8 | 17 | 14.1 | 281.5 | 16.1 | 262.3 | 17.6 | 278.9 | 26.2 | 25.8 | 25.3 | 15.1 | -0.87 | 0.00 | 0.48 |
| 77 | 7 | 8 | 18 | 12.7 | 284.1 | 14.9 | 264.0 | 16.6 | 278.7 | 24.7 | 24.7 | 24.3 | 15.8 | -0.44 | 0.00 | 0.12 |
| 77 | 7 | 8 | 19 | 14.1 | 296.8 | 17.4 | 276.2 | 20.0 | 296.9 | 23.2 | 23.4 | 23.0 | 16.3 | -0.15 | 0.00 | 0.05 |
| 77 | 7 | 8 | 20 | 12.6 | 286.8 | 14.9 | 269.4 | 16.9 | 289.3 | 22.4 | 22.6 | 22.2 | 16.6 | -0.13 | 0.00 | 0.01 |
| 77 | 7 | 8 | 21 | 10.0 | 291.2 | 12.5 | 278.3 | 14.4 | 301.4 | 21.5 | 21.9 | 21.6 | 16.9 | 0.12 | 0.00 | 0.01 |
| 77 | 7 | 8 | 22 | 5.9 | 265.2 | 6.0 | 265.2 | 6.6 | 310.8 | 20.4 | 20.9 | 21.0 | 17.4 | 0.63 | 0.00 | 0.00 |
| 77 | 7 | 8 | 23 | 11.9 | 303.1 | 14.5 | 302.7 | 16.4 | 319.7 | 18.4 | 19.7 | 20.0 | 18.1 | 1.64 | 0.04 | 0.01 |
| 77 | 7 | 8 | 24 | 9.2 | 245.3 | 9.0 | 248.4 | 9.0 | 258.6 | 19.4 | 21.0 | 21.0 | 17.6 | 1.65 | 0.04 | 0.00 |
| 77 | 7 | 9 | 1 | 5.3 | 205.7 | 6.4 | 184.1 | 7.7 | 187.6 | 18.7 | 19.5 | 19.8 | 18.0 | 1.11 | 0.04 | 0.00 |
| 77 | 7 | 9 | 2 | 6.2 | 231.4 | 7.7 | 203.4 | 8.4 | 197.8 | 18.3 | 18.9 | 18.8 | 18.1 | 0.58 | 0.04 | 0.00 |
| 77 | 7 | 9 | 3 | 5.6 | 278.5 | 5.3 | 257.9 | 4.8 | 244.0 | 18.9 | 19.4 | 19.4 | 17.9 | 0.46 | 0.04 | 0.00 |
| 77 | 7 | 9 | 4 | 8.2 | 220.8 | 9.7 | 196.6 | 11.2 | 199.5 | 18.9 | 19.8 | 20.0 | 17.8 | 1.09 | 0.04 | 0.00 |
| 77 | 7 | 9 | 5 | 5.0 | 225.7 | 5.5 | 233.7 | 6.2 | 228.0 | 19.8 | 19.5 | 20.1 | 17.6 | 0.34 | 0.04 | 0.02 |
| 77 | 7 | 9 | 6 | 6.8 | 266.9 | 6.8 | 254.7 | 6.5 | 225.6 | 17.7 | 18.3 | 18.4 | 18.3 | 0.63 | 0.04 | 0.06 |
| 77 | 7 | 9 | 7 | 4.5 | 95.8 | 5.2 | 89.7 | 5.7 | 97.6 | 18.4 | 18.9 | 18.5 | 17.6 | 0.09 | 0.04 | 0.32 |
| 77 | 7 | 9 | 8 | 6.8 | 85.0 | 7.1 | 74.3 | 7.7 | 84.3 | 20.2 | 20.3 | 19.6 | 16.6 | -0.60 | 0.04 | 0.71 |
| 77 | 7 | 9 | 9 | 8.3 | 166.9 | 9.5 | 158.2 | 10.6 | 172.1 | 22.4 | 22.2 | 21.5 | 16.1 | -0.85 | 0.04 | 0.79 |
| 77 | 7 | 9 | 10 | 13.1 | 230.5 | 15.8 | 220.4 | 17.6 | 231.5 | 24.4 | 23.5 | 23.2 | 15.7 | -1.21 | 0.04 | 1.20 |
| 77 | 7 | 9 | 11 | 14.2 | 213.5 | 17.2 | 204.3 | 19.2 | 222.2 | 25.3 | 24.1 | 23.8 | 15.4 | -1.42 | 0.04 | 1.39 |
| 77 | 7 | 9 | 12 | 15.0 | 219.0 | 18.2 | 211.0 | 21.3 | 226.0 | 25.6 | 24.4 | 24.1 | 15.2 | -1.44 | 0.04 | 1.48 |
| 77 | 7 | 9 | 13 | 16.5 | 216.9 | 20.7 | 208.4 | 24.4 | 224.3 | 25.8 | 24.6 | 24.4 | 15.2 | -1.42 | 0.04 | 1.29 |
| 77 | 7 | 9 | 14 | 15.8 | 220.3 | 19.4 | 210.7 | 22.4 | 224.3 | 26.0 | 25.0 | 24.8 | 15.1 | -1.29 | 0.04 | 1.10 |
| 77 | 7 | 9 | 15 | 17.1 | 221.7 | 20.9 | 212.0 | 24.9 | 224.9 | 26.3 | 25.4 | 25.2 | 15.1 | -1.09 | 0.04 | 1.05 |
| 77 | 7 | 9 | 16 | 14.9 | 226.1 | 18.8 | 215.4 | 22.7 | 226.0 | 26.0 | 25.5 | 25.1 | 15.2 | -0.94 | 0.04 | 0.73 |
| 77 | 7 | 9 | 17 | 15.6 | 215.0 | 20.1 | 205.7 | 23.8 | 219.8 | 25.8 | 25.4 | 25.2 | 15.2 | -0.67 | 0.04 | 0.64 |
| 77 | 7 | 9 | 18 | 12.8 | 214.0 | 16.3 | 207.1 | 20.2 | 223.2 | 24.9 | 24.9 | 24.5 | 15.6 | -0.43 | 0.04 | 0.28 |
| 77 | 7 | 9 | 19 | 12.7 | 215.5 | 16.5 | 208.1 | 21.4 | 223.1 | 24.1 | 24.3 | 24.0 | 15.9 | -0.17 | 0.04 | 0.09 |
| 77 | 7 | 9 | 20 | 7.2 | 220.8 | 9.2 | 217.2 | 15.8 | 227.0 | 22.4 | 22.6 | 22.6 | 16.7 | 0.26 | 0.04 | 0.01 |
| 77 | 7 | 9 | 21 | 6.3 | 233.9 | 9.3 | 218.3 | 16.5 | 224.9 | 21.3 | 21.6 | 21.8 | 17.2 | 0.53 | 0.04 | 0.00 |
| 77 | 7 | 9 | 22 | 6.4 | 231.8 | 9.8 | 216.3 | 16.4 | 220.5 | 20.9 | 21.3 | 21.6 | 17.2 | 0.75 | 0.04 | 0.00 |
| 77 | 7 | 9 | 23 | 6.7 | 250.0 | 8.9 | 225.2 | 15.5 | 228.4 | 20.6 | 21.0 | 21.1 | 17.3 | 0.51 | 0.04 | 0.00 |
| 77 | 7 | 9 | 24 | 10.3 | 262.6 | 12.4 | 247.3 | 15.3 | 253.2 | 20.6 | 21.2 | 21.0 | 17.2 | 0.46 | 0.04 | 0.00 |
| 77 | 7 | 10 | 1 | 12.1 | 261.0 | 13.6 | 244.4 | 15.7 | 244.7 | 19.9 | 20.6 | 20.7 | 17.4 | 0.86 | 0.04 | 0.00 |
| 77 | 7 | 10 | 2 | 11.3 | 267.9 | 13.0 | 247.5 | 16.0 | 243.2 | 19.0 | 19.9 | 20.4 | 17.8 | 1.39 | 0.04 | 0.00 |
| 77 | 7 | 10 | 3 | 10.5 | 278.1 | 10.7 | 250.1 | 15.0 | 240.7 | 18.3 | 18.9 | 19.1 | 18.0 | 0.84 | 0.04 | 0.00 |
| 77 | 7 | 10 | 4 | 5.9 | 248.4 | 8.2 | 231.8 | 15.7 | 232.6 | 17.6 | 18.0 | 18.2 | 18.4 | 0.66 | 0.04 | 0.00 |
| 77 | 7 | 10 | 5 | 9.5 | 268.8 | 11.4 | 249.6 | 15.7 | 246.8 | 17.2 | 17.8 | 17.7 | 18.5 | 0.55 | 0.04 | 0.02 |
| 77 | 7 | 10 | 6 | 8.7 | 262.2 | 10.2 | 242.8 | 12.4 | 245.1 | 18.0 | 18.7 | 18.2 | 18.0 | 0.22 | 0.04 | 0.19 |
| 77 | 7 | 10 | 7 | 7.0 | 232.1 | 8.4 | 222.1 | 9.9 | 240.6 | 20.4 | 20.4 | 19.7 | 16.9 | -0.71 | 0.04 | 0.43 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MO | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 10 | 8 | 13.3 | 264.8 | 15.2 | 252.6 | 17.0 | 261.1 | 21.4 | 20.9 | 20.6 | 16.8 | -0.87 | 0.04 | 0.76 |
| 77 | 7 | 10 | 9 | 12.4 | 278.3 | 13.9 | 266.6 | 14.7 | 274.9 | 22.4 | 21.8 | 21.4 | 16.5 | -1.09 | 0.04 | 1.03 |
| 77 | 7 | 10 | 10 | 12.0 | 280.7 | 13.4 | 269.5 | 14.1 | 276.3 | 23.2 | 22.3 | 21.9 | 16.2 | -1.21 | 0.04 | 1.24 |
| 77 | 7 | 10 | 11 | 12.2 | 203.8 | 14.7 | 197.5 | 16.1 | 213.6 | 24.1 | 23.1 | 22.7 | 15.7 | -1.33 | 0.04 | 1.38 |
| 77 | 7 | 10 | 12 | 14.2 | 248.9 | 16.8 | 238.3 | 18.7 | 248.7 | 24.9 | 23.8 | 23.6 | 15.4 | -1.33 | 0.04 | 1.44 |
| 77 | 7 | 10 | 13 | 13.6 | 252.4 | 15.7 | 239.1 | 17.5 | 246.4 | 25.7 | 24.5 | 24.4 | 15.1 | -1.33 | 0.04 | 1.42 |
| 77 | 7 | 10 | 14 | 18.3 | 264.3 | 21.1 | 253.8 | 23.0 | 263.6 | 26.2 | 24.9 | 24.8 | 15.2 | -1.36 | 0.04 | 1.35 |
| 77 | 7 | 10 | 15 | 18.5 | 279.0 | 21.0 | 267.6 | 23.5 | 275.8 | 26.2 | 25.0 | 25.0 | 15.3 | -1.16 | 0.04 | 1.17 |
| 77 | 7 | 10 | 16 | 13.9 | 264.6 | 15.9 | 252.3 | 18.7 | 262.4 | 25.8 | 25.2 | 24.7 | 15.3 | -1.08 | 0.04 | 0.77 |
| 77 | 7 | 10 | 17 | 13.3 | 281.1 | 15.2 | 270.0 | 16.8 | 278.3 | 25.6 | 25.1 | 24.6 | 15.3 | -0.95 | 0.04 | 0.60 |
| 77 | 7 | 10 | 18 | 17.0 | 311.5 | 19.8 | 299.4 | 21.6 | 309.9 | 24.8 | 24.6 | 24.1 | 15.7 | -0.77 | 0.04 | 0.38 |
| 77 | 7 | 10 | 19 | 15.1 | 319.8 | 17.9 | 308.3 | 19.9 | 317.3 | 23.1 | 23.4 | 22.7 | 16.4 | -0.37 | 0.04 | 0.10 |
| 77 | 7 | 10 | 20 | 9.0 | 296.3 | 11.3 | 292.8 | 13.7 | 306.7 | 21.1 | 21.6 | 21.5 | 17.4 | 0.41 | 0.04 | 0.01 |
| 77 | 7 | 10 | 21 | 8.9 | 287.1 | 10.1 | 291.8 | 11.2 | 305.5 | 20.1 | 21.1 | 20.9 | 17.6 | 0.85 | 0.04 | 0.01 |
| 77 | 7 | 10 | 22 | 7.9 | 303.0 | 9.8 | 303.7 | 11.3 | 326.8 | 18.9 | 19.7 | 19.7 | 18.0 | 0.82 | 0.04 | 0.00 |
| 77 | 7 | 10 | 23 | 3.7 | 332.3 | 4.5 | 357.9 | 5.9 | 27.6 | 17.7 | 17.7 | 18.0 | 18.7 | 0.33 | 0.04 | 0.00 |
| 77 | 7 | 10 | 24 | 2.9 | 196.1 | 2.6 | 124.0 | 3.5 | 102.6 | 17.1 | 16.4 | 17.3 | 19.2 | 0.26 | 0.04 | 0.00 |
| 77 | 7 | 11 | 1 | 3.7 | 220.1 | 3.1 | 193.8 | 2.8 | 165.2 | 16.7 | 16.4 | 16.8 | 19.1 | 0.11 | 0.04 | 0.00 |
| 77 | 7 | 11 | 2 | 5.4 | 265.7 | 3.7 | 257.3 | 2.8 | 281.3 | 16.9 | 16.7 | 16.9 | 18.9 | 0.02 | 0.04 | 0.00 |
| 77 | 7 | 11 | 3 | 4.0 | 272.0 | 3.2 | 269.7 | 2.3 | 296.7 | 17.1 | 16.6 | 17.2 | 18.9 | 0.07 | 0.04 | 0.00 |
| 77 | 7 | 11 | 4 | 5.0 | 246.4 | 3.7 | 225.6 | 3.0 | 221.9 | 17.1 | 16.6 | 17.2 | 18.8 | 0.04 | 0.04 | 0.00 |
| 77 | 7 | 11 | 5 | 9.4 | 250.6 | 10.9 | 244.6 | 10.7 | 256.5 | 16.1 | 17.3 | 17.5 | 18.9 | 1.35 | 0.04 | 0.02 |
| 77 | 7 | 11 | 6 | 11.9 | 254.3 | 15.3 | 247.3 | 16.1 | 259.8 | 16.5 | 17.4 | 17.4 | 18.7 | 0.83 | 0.04 | 0.18 |
| 77 | 7 | 11 | 7 | 10.1 | 264.2 | 11.5 | 250.8 | 13.4 | 260.6 | 18.6 | 18.4 | 17.8 | 17.8 | -0.74 | 0.04 | 0.42 |
| 77 | 7 | 11 | 8 | 10.0 | 268.1 | 10.8 | 253.1 | 11.6 | 259.8 | 19.9 | 19.6 | 19.0 | 17.3 | -0.86 | 0.04 | 0.74 |
| 77 | 7 | 11 | 9 | 11.7 | 270.8 | 12.9 | 256.7 | 13.8 | 263.5 | 21.2 | 20.7 | 20.3 | 16.9 | -0.93 | 0.04 | 1.00 |
| 77 | 7 | 11 | 10 | 11.5 | 287.9 | 12.9 | 275.0 | 13.8 | 283.3 | 22.5 | 21.8 | 21.4 | 16.4 | -1.11 | 0.04 | 1.22 |
| 77 | 7 | 11 | 11 | 12.3 | 288.0 | 13.9 | 275.4 | 14.7 | 282.5 | 23.9 | 22.9 | 22.6 | 15.9 | -1.29 | 0.04 | 1.37 |
| 77 | 7 | 11 | 12 | 9.7 | 272.5 | 10.9 | 260.2 | 11.9 | 271.0 | 24.4 | 23.6 | 23.1 | 15.6 | -1.29 | 0.04 | 1.43 |
| 77 | 7 | 11 | 13 | 10.3 | 252.1 | 11.5 | 248.5 | 12.8 | 259.6 | 25.3 | 24.6 | 24.1 | 15.0 | -1.19 | 0.04 | 1.39 |
| 77 | 7 | 11 | 14 | 9.9 | 239.9 | 11.2 | 275.4 | 12.3 | 284.3 | 25.4 | 24.7 | 24.3 | 15.1 | -1.15 | 0.04 | 1.35 |
| 77 | 7 | 11 | 15 | 10.4 | 296.5 | 11.9 | 277.8 | 12.9 | 283.6 | 25.8 | 25.1 | 24.7 | 15.1 | -1.13 | 0.04 | 1.17 |
| 77 | 7 | 11 | 16 | 7.3 | 288.4 | 8.2 | 275.4 | 9.1 | 286.6 | 26.0 | 25.7 | 25.0 | 14.7 | -1.03 | 0.04 | 0.77 |
| 77 | 7 | 11 | 17 | 7.1 | 266.5 | 8.0 | 257.6 | 9.1 | 270.7 | 26.3 | 26.2 | 25.5 | 14.5 | -0.80 | 0.04 | 0.63 |
| 77 | 7 | 11 | 18 | 9.4 | 291.9 | 10.7 | 280.2 | 11.6 | 289.5 | 25.8 | 25.7 | 25.1 | 15.1 | -0.72 | 0.04 | 0.35 |
| 77 | 7 | 11 | 19 | 10.1 | 314.6 | 12.3 | 304.8 | 13.7 | 316.9 | 24.8 | 25.2 | 24.4 | 15.6 | -0.39 | 0.04 | 0.11 |
| 77 | 7 | 11 | 20 | 7.3 | 264.8 | 8.5 | 262.5 | 9.3 | 278.8 | 23.4 | 23.8 | 23.5 | 16.4 | 0.12 | 0.04 | 0.01 |
| 77 | 7 | 11 | 21 | 9.8 | 260.5 | 10.8 | 242.8 | 12.4 | 245.3 | 21.9 | 22.5 | 22.5 | 16.9 | 0.65 | 0.04 | 0.01 |
| 77 | 7 | 11 | 22 | 10.5 | 261.6 | 12.0 | 254.5 | 12.8 | 265.5 | 21.6 | 22.5 | 22.4 | 17.0 | 0.85 | 0.04 | 0.00 |
| 77 | 7 | 11 | 23 | 9.8 | 267.7 | 12.6 | 265.2 | 15.5 | 279.9 | 20.8 | 21.9 | 22.0 | 17.2 | 1.24 | 0.04 | 0.00 |
| 77 | 7 | 11 | 24 | 4.4 | 357.3 | 5.2 | 355.2 | 5.8 | 20.8 | 19.1 | 19.4 | 19.8 | 18.0 | 0.71 | 0.04 | 0.00 |
| 77 | 7 | 12 | 1 | 3.1 | 288.3 | 3.2 | 356.8 | 4.1 | 50.6 | 19.4 | 19.1 | 20.0 | 18.0 | 0.58 | 0.04 | 0.00 |
| 77 | 7 | 12 | 2 | 3.0 | 225.0 | 2.8 | 188.9 | 3.5 | 153.3 | 19.4 | 18.8 | 19.7 | 18.2 | 0.22 | 0.04 | 0.00 |
| 77 | 7 | 12 | 3 | 5.5 | 237.3 | 5.3 | 208.5 | 5.0 | 201.6 | 19.3 | 19.6 | 19.6 | 17.8 | 0.26 | 0.04 | 0.00 |
| 77 | 7 | 12 | 4 | 6.0 | 238.5 | 5.6 | 206.7 | 5.4 | 196.1 | 19.2 | 19.5 | 19.5 | 17.8 | 0.24 | 0.04 | 0.00 |
| 77 | 7 | 12 | 5 | 5.1 | 241.5 | 5.5 | 203.8 | 5.6 | 195.9 | 18.8 | 19.3 | 19.3 | 17.9 | 0.42 | 0.04 | 0.02 |
| 77 | 7 | 12 | 6 | 1.9 | 423.8 | 1.7 | 355.0 | 2.0 | 100.3 | 18.2 | 19.1 | 18.9 | 17.3 | 0.66 | 0.04 | 0.18 |
| 77 | 7 | 12 | 7 | 2.9 | 84.3 | 3.4 | 80.5 | 3.9 | 100.5 | 19.1 | 20.1 | 18.8 | 16.4 | -0.28 | 0.04 | 0.41 |
| 77 | 7 | 12 | 8 | 8.0 | 179.9 | 9.4 | 177.2 | 10.3 | 199.7 | 22.4 | 22.2 | 21.5 | 15.9 | -0.82 | 0.04 | 0.73 |
| 77 | 7 | 12 | 9 | 10.1 | 218.5 | 12.3 | 210.4 | 13.9 | 229.4 | 24.1 | 23.4 | 22.8 | 15.8 | -1.24 | 0.04 | 1.00 |
| 77 | 7 | 12 | 10 | 10.7 | 215.9 | 12.4 | 205.2 | 13.5 | 220.5 | 25.1 | 24.2 | 23.7 | 15.4 | -1.33 | 0.04 | 1.21 |
| 77 | 7 | 12 | 11 | 12.8 | 202.0 | 15.8 | 192.9 | 17.2 | 210.4 | 25.9 | 24.8 | 24.5 | 15.0 | -1.44 | 0.04 | 1.37 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 7 | 12 | 12 | 11.6 | 195.5 | 13.7 | 190.5 | 15.0 | 210.0 | 26.2 | 25.3 | 24.9 | 14.7 | -1.28 | 0.04 | 1.43 |
| 77 | 7 | 12 | 13 | 11.6 | 223.5 | 13.7 | 209.6 | 15.1 | 221.8 | 26.8 | 25.9 | 25.4 | 14.6 | -1.39 | 0.04 | 1.40 |
| 77 | 7 | 12 | 14 | 12.1 | 208.0 | 14.8 | 198.0 | 16.5 | 212.9 | 27.3 | 26.2 | 25.8 | 14.5 | -1.44 | 0.04 | 1.32 |
| 77 | 7 | 12 | 15 | 10.7 | 234.5 | 12.6 | 219.0 | 14.4 | 226.9 | 27.8 | 27.0 | 26.5 | 14.2 | -1.32 | 0.04 | 1.16 |
| 77 | 7 | 12 | 16 | 9.0 | 232.5 | 11.0 | 218.5 | 12.9 | 231.6 | 27.7 | 27.1 | 26.5 | 14.2 | -1.13 | 0.04 | 0.93 |
| 77 | 7 | 12 | 17 | 9.7 | 213.7 | 11.7 | 204.2 | 13.1 | 218.3 | 27.4 | 27.0 | 26.4 | 14.2 | -0.97 | 0.04 | 0.66 |
| 77 | 7 | 12 | 18 | 7.9 | 221.6 | 9.9 | 215.8 | 12.1 | 229.8 | 26.8 | 26.8 | 26.2 | 14.5 | -0.63 | 0.04 | 0.32 |
| 77 | 7 | 12 | 19 | 4.3 | 254.0 | 6.1 | 227.8 | 10.4 | 233.4 | 25.2 | 25.3 | 25.1 | 15.4 | -0.02 | 0.04 | 0.06 |
| 77 | 7 | 12 | 20 | 6.9 | 270.7 | 7.4 | 235.8 | 13.4 | 236.0 | 23.6 | 23.8 | 24.2 | 16.2 | 0.61 | 0.04 | 0.01 |
| 77 | 7 | 12 | 21 | 7.3 | 266.3 | 8.9 | 233.3 | 13.6 | 227.3 | 22.8 | 23.3 | 24.3 | 16.5 | 1.41 | 0.04 | 0.01 |
| 77 | 7 | 12 | 22 | 6.6 | 273.3 | 8.2 | 243.2 | 13.1 | 233.2 | 22.2 | 22.6 | 23.2 | 16.7 | 1.06 | 0.04 | 0.00 |
| 77 | 7 | 12 | 23 | 6.3 | 262.2 | 8.5 | 225.0 | 16.1 | 226.4 | 21.5 | 22.1 | 22.6 | 16.9 | 1.04 | 0.04 | 0.00 |
| 77 | 7 | 12 | 24 | 6.4 | 242.1 | 9.3 | 221.6 | 16.5 | 225.3 | 21.2 | 21.5 | 21.7 | 16.9 | 0.51 | 0.04 | 0.00 |
| 77 | 7 | 13 | 1 | 10.7 | 215.8 | 15.0 | 205.2 | 19.5 | 215.0 | 20.7 | 21.1 | 20.9 | 17.0 | 0.19 | 0.04 | 0.00 |
| 77 | 7 | 13 | 2 | 12.4 | 214.8 | 16.9 | 206.2 | 22.4 | 218.8 | 20.6 | 21.0 | 20.6 | 17.0 | -0.01 | 0.04 | 0.00 |
| 77 | 7 | 13 | 3 | 11.5 | 210.4 | 16.0 | 201.3 | 20.0 | 214.9 | 20.9 | 21.1 | 20.7 | 16.9 | -0.15 | 0.04 | 0.00 |
| 77 | 7 | 13 | 4 | 9.3 | 210.3 | 12.9 | 198.0 | 15.8 | 209.5 | 20.0 | 20.3 | 19.9 | 17.3 | -0.04 | 0.04 | 0.00 |
| 77 | 7 | 13 | 5 | 11.9 | 214.5 | 16.3 | 204.5 | 20.7 | 216.0 | 19.0 | 19.3 | 19.0 | 17.6 | 0.01 | 0.04 | 0.01 |
| 77 | 7 | 13 | 6 | 14.7 | 207.0 | 19.3 | 196.0 | 22.5 | 210.3 | 19.1 | 19.2 | 18.8 | 17.5 | -0.36 | 0.04 | 0.14 |
| 77 | 7 | 13 | 7 | 15.5 | 206.7 | 20.1 | 197.1 | 23.0 | 212.3 | 19.3 | 19.2 | 18.7 | 17.5 | -0.52 | 0.04 | 0.17 |
| 77 | 7 | 13 | 8 | 13.8 | 210.5 | 17.9 | 201.0 | 21.4 | 215.3 | 19.3 | 19.2 | 18.7 | 17.6 | -0.55 | 0.04 | 0.21 |
| 77 | 7 | 13 | 9 | 13.3 | 203.8 | 17.3 | 197.5 | 19.7 | 213.4 | 19.9 | 19.4 | 19.0 | 17.3 | -0.88 | 0.04 | 0.51 |
| 77 | 7 | 13 | 10 | 13.5 | 210.3 | 16.5 | 200.3 | 18.4 | 216.1 | 21.4 | 20.7 | 20.3 | 16.7 | -1.16 | 0.04 | 0.92 |
| 77 | 7 | 13 | 11 | 12.5 | 219.5 | 15.5 | 207.4 | 17.7 | 225.2 | 22.7 | 21.9 | 21.4 | 16.2 | -1.34 | 0.04 | 1.09 |
| 77 | 7 | 13 | 12 | 10.7 | 227.2 | 13.0 | 213.2 | 15.3 | 226.4 | 22.9 | 22.4 | 21.8 | 16.0 | -1.09 | 0.04 | 0.71 |
| 77 | 7 | 13 | 13 | 10.6 | 241.4 | 12.7 | 229.0 | 14.3 | 241.3 | 22.8 | 22.4 | 21.8 | 16.2 | -0.95 | 0.05 | 0.56 |
| 77 | 7 | 13 | 14 | 9.4 | 257.4 | 10.9 | 238.8 | 12.6 | 246.0 | 22.8 | 22.5 | 22.2 | 16.5 | -0.57 | 0.08 | 0.99 |
| 77 | 7 | 13 | 15 | 12.7 | 213.6 | 15.8 | 203.1 | 17.8 | 220.5 | 24.6 | 23.9 | 23.4 | 15.6 | -1.21 | 0.08 | 1.07 |
| 77 | 7 | 13 | 16 | 10.9 | 222.6 | 12.7 | 209.1 | 14.5 | 223.3 | 24.7 | 24.4 | 23.8 | 15.4 | -0.90 | 0.08 | 0.59 |
| 77 | 7 | 13 | 17 | 9.2 | 229.6 | 10.9 | 222.8 | 12.9 | 233.8 | 23.0 | 23.1 | 22.7 | 16.3 | -0.32 | 0.10 | 0.16 |
| 77 | 7 | 13 | 18 | 11.8 | 311.0 | 14.4 | 299.9 | 15.9 | 308.3 | 20.4 | 20.9 | 20.9 | 17.6 | 0.55 | 0.29 | 0.07 |
| 77 | 7 | 13 | 19 | 14.1 | 379.8 | 16.2 | 368.0 | 17.8 | 380.2 | 18.9 | 19.8 | 19.7 | 18.0 | 0.75 | 0.32 | 0.06 |
| 77 | 7 | 13 | 20 | 10.5 | 227.6 | 12.6 | 206.8 | 13.5 | 203.8 | 19.6 | 20.5 | 20.4 | 17.5 | 0.76 | 0.32 | 0.01 |
| 77 | 7 | 13 | 21 | 7.7 | 255.0 | 10.1 | 225.3 | 13.5 | 217.3 | 18.9 | 19.7 | 20.3 | 17.8 | 1.42 | 0.32 | 0.00 |
| 77 | 7 | 13 | 22 | 2.9 | 242.0 | 5.2 | 221.9 | 8.0 | 207.0 | 18.6 | 19.2 | 19.8 | 18.1 | 1.18 | 0.32 | 0.00 |
| 77 | 7 | 13 | 23 | 4.5 | 357.8 | 6.1 | 24.5 | 7.8 | 52.7 | 18.3 | 18.8 | 18.9 | 18.3 | 0.54 | 0.32 | 0.01 |
| 77 | 7 | 13 | 24 | 4.0 | 352.1 | 4.4 | 359.5 | 4.9 | 375.7 | 17.3 | 17.5 | 17.7 | 18.7 | 0.35 | 0.32 | 0.00 |
| 77 | 7 | 14 | 1 | 4.7 | 315.8 | 4.4 | 346.2 | 5.6 | 45.2 | 15.8 | 16.0 | 16.3 | 19.9 | 0.45 | 0.32 | 0.00 |
| 77 | 7 | 14 | 2 | 3.7 | 248.9 | 3.4 | 232.2 | 3.7 | 132.1 | 15.7 | 15.7 | 16.0 | 20.4 | 0.29 | 0.32 | 0.00 |
| 77 | 7 | 14 | 3 | 5.2 | 242.8 | 5.7 | 211.0 | 6.0 | 194.1 | 15.9 | 16.4 | 16.5 | 19.7 | 0.62 | 0.32 | 0.00 |
| 77 | 7 | 14 | 4 | 3.5 | 243.3 | 4.3 | 191.7 | 5.2 | 177.8 | 16.6 | 16.9 | 17.2 | 19.2 | 0.59 | 0.32 | 0.00 |
| 77 | 7 | 14 | 5 | 2.0 | 272.6 | 2.1 | 388.7 | 3.2 | 71.7 | 16.0 | 15.1 | 16.3 | 19.6 | 0.24 | 0.32 | 0.02 |
| 77 | 7 | 14 | 6 | 1.7 | 297.6 | 2.0 | 262.4 | 2.1 | 237.4 | 16.2 | 16.8 | 16.4 | 18.6 | 0.17 | 0.32 | 0.17 |
| 77 | 7 | 14 | 7 | 2.6 | 134.0 | 3.0 | 121.9 | 3.6 | 177.5 | 18.3 | 19.1 | 18.0 | 16.8 | -0.29 | 0.32 | 0.40 |
| 77 | 7 | 14 | 8 | 4.2 | 143.7 | 5.1 | 212.7 | 6.1 | 219.5 | 21.2 | 21.7 | 20.7 | 16.1 | -0.59 | 0.32 | 0.67 |
| 77 | 7 | 14 | 9 | 10.4 | 253.3 | 12.1 | 242.7 | 13.9 | 247.7 | 23.4 | 23.0 | 22.4 | 16.3 | -0.96 | 0.32 | 1.00 |
| 77 | 7 | 14 | 10 | 10.5 | 267.7 | 11.5 | 256.3 | 12.3 | 262.3 | 24.1 | 23.6 | 23.1 | 16.0 | -0.99 | 0.32 | 1.20 |
| 77 | 7 | 14 | 11 | 10.5 | 264.7 | 11.5 | 255.3 | 12.4 | 265.1 | 24.9 | 24.3 | 23.8 | 15.7 | -1.09 | 0.32 | 1.20 |
| 77 | 7 | 14 | 12 | 7.5 | 291.2 | 8.5 | 289.3 | 9.5 | 284.3 | 25.0 | 24.7 | 24.2 | 15.6 | -0.82 | 0.32 | 0.93 |
| 77 | 7 | 14 | 13 | 11.6 | 322.2 | 12.8 | 311.4 | 13.5 | 319.4 | 25.7 | 25.1 | 24.6 | 15.5 | -1.07 | 0.32 | 1.03 |
| 77 | 7 | 14 | 14 | 12.1 | 291.1 | 14.0 | 279.3 | 15.4 | 287.0 | 25.5 | 25.0 | 24.5 | 15.7 | -1.04 | 0.32 | 0.79 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 25 | 13 | 9.3 | 12.9 | 10.1 | 362.6 | 10.3 | 16.4 | 20.7 | 20.4 | 19.7 | 17.5 | -0.97 | 2.07 | 0.95 |
| 77 | 7 | 25 | 14 | 7.8 | 363.0 | 8.2 | 346.6 | 8.6 | 366.4 | 21.5 | 21.3 | 20.5 | 16.9 | -1.04 | 2.07 | 1.02 |
| 77 | 7 | 25 | 15 | 8.1 | 43.8 | 8.8 | 34.1 | 9.4 | 45.2 | 21.9 | 21.8 | 21.0 | 16.0 | -0.88 | 2.76 | 1.02 |
| 77 | 7 | 25 | 16 | 8.4 | 39.9 | 9.1 | 28.0 | 9.8 | 37.8 | 22.3 | 22.2 | 21.5 | 15.8 | -0.83 | 2.76 | 0.84 |
| 77 | 7 | 25 | 17 | 7.9 | 42.1 | 8.4 | 30.1 | 8.7 | 42.6 | 22.6 | 22.7 | 21.9 | 15.6 | -0.67 | 2.76 | 0.59 |
| 77 | 7 | 25 | 18 | 6.3 | 42.8 | 7.0 | 28.8 | 7.4 | 38.7 | 22.6 | 22.8 | 22.0 | 15.3 | -0.58 | 2.76 | 0.33 |
| 77 | 7 | 25 | 19 | 6.4 | 374.6 | 8.2 | 15.7 | 9.1 | 30.3 | 21.7 | 22.2 | 21.7 | 16.3 | 0.07 | 2.76 | 0.09 |
| 77 | 7 | 25 | 20 | 4.8 | 321.7 | 5.2 | 347.8 | 7.7 | 33.6 | 20.2 | 20.5 | 21.2 | 17.4 | 1.01 | 2.76 | 0.01 |
| 77 | 7 | 25 | 21 | 5.2 | 322.5 | 5.6 | 344.2 | 8.0 | 30.3 | 19.6 | 19.9 | 20.5 | 17.6 | 0.83 | 2.76 | 0.01 |
| 77 | 7 | 25 | 22 | 3.0 | 332.1 | 3.7 | 375.3 | 6.1 | 62.1 | 19.2 | 18.9 | 19.7 | 18.0 | 0.41 | 2.76 | 0.01 |
| 77 | 7 | 25 | 23 | 3.4 | 292.9 | 2.6 | 301.5 | 2.5 | 383.5 | 18.8 | 18.3 | 18.9 | 18.1 | 0.13 | 2.76 | 0.01 |
| 77 | 7 | 25 | 24 | 3.8 | 289.5 | 3.0 | 283.2 | 2.4 | 311.1 | 18.8 | 18.3 | 18.8 | 18.2 | 0.02 | 2.76 | 0.01 |
| 77 | 7 | 26 | 1 | 4.8 | 253.7 | 4.4 | 228.0 | 4.4 | 223.1 | 18.9 | 18.8 | 18.9 | 18.0 | -0.05 | 2.76 | 0.01 |
| 77 | 7 | 26 | 2 | 5.7 | 233.0 | 6.3 | 212.3 | 6.5 | 205.6 | 18.2 | 18.7 | 18.6 | 18.1 | 0.47 | 2.76 | 0.01 |
| 77 | 7 | 26 | 3 | 5.9 | 239.0 | 5.8 | 212.4 | 5.7 | 201.7 | 18.3 | 18.7 | 18.5 | 18.1 | 0.22 | 2.76 | 0.01 |
| 77 | 7 | 26 | 4 | 3.0 | 226.7 | 2.4 | 213.9 | 2.5 | 198.3 | 18.5 | 17.9 | 18.6 | 18.3 | 0.17 | 2.76 | 0.01 |
| 77 | 7 | 26 | 5 | 2.5 | 398.0 | 3.1 | 400.8 | 3.1 | 70.4 | 16.3 | 16.1 | 17.2 | 19.4 | 0.91 | 2.76 | 0.02 |
| 77 | 7 | 26 | 6 | 1.8 | 260.8 | 2.1 | 355.9 | 2.7 | 388.2 | 15.3 | 15.8 | 15.6 | 19.4 | 0.33 | 2.76 | 0.11 |
| 77 | 7 | 26 | 7 | 2.3 | 126.0 | 2.1 | 151.9 | 2.5 | 193.5 | 17.0 | 18.7 | 17.0 | 17.4 | -0.07 | 2.76 | 0.37 |
| 77 | 7 | 26 | 8 | 3.9 | 85.7 | 4.2 | 78.2 | 4.4 | 98.7 | 19.0 | 19.7 | 18.5 | 16.5 | -0.53 | 2.76 | 0.68 |
| 77 | 7 | 26 | 9 | 4.3 | 57.7 | 4.6 | 48.0 | 4.7 | 66.5 | 20.9 | 21.5 | 20.4 | 16.3 | -0.55 | 2.76 | 0.94 |
| 77 | 7 | 26 | 10 | 6.3 | 62.0 | 6.8 | 51.2 | 7.4 | 67.0 | 22.8 | 22.8 | 22.0 | 15.4 | -0.77 | 2.76 | 1.17 |
| 77 | 7 | 26 | 11 | 8.5 | 284.7 | 9.5 | 277.5 | 10.3 | 290.6 | 24.0 | 23.6 | 23.0 | 15.2 | -0.99 | 2.76 | 1.28 |
| 77 | 7 | 26 | 12 | 12.7 | 318.2 | 14.0 | 304.9 | 14.6 | 314.9 | 24.6 | 23.8 | 23.4 | 15.2 | -1.20 | 2.76 | 1.32 |
| 77 | 7 | 26 | 13 | 12.3 | 332.7 | 13.2 | 319.7 | 14.0 | 329.1 | 24.9 | 24.2 | 23.8 | 15.1 | -1.17 | 2.76 | 1.38 |
| 77 | 7 | 26 | 14 | 9.5 | 318.9 | 10.3 | 303.0 | 11.1 | 309.6 | 25.2 | 24.7 | 24.2 | 14.7 | -0.99 | 2.76 | 1.25 |
| 77 | 7 | 26 | 15 | 10.5 | 317.7 | 11.5 | 306.6 | 12.1 | 318.4 | 25.6 | 25.1 | 24.5 | 14.6 | -1.04 | 2.76 | 1.09 |
| 77 | 7 | 26 | 16 | 6.7 | 349.1 | 7.3 | 334.2 | 8.2 | 340.2 | 25.2 | 25.1 | 24.4 | 14.6 | -0.76 | 2.76 | 0.70 |
| 77 | 7 | 26 | 17 | 7.9 | 310.4 | 9.1 | 301.3 | 9.8 | 310.9 | 25.6 | 25.4 | 24.7 | 14.6 | -0.84 | 2.76 | 0.57 |
| 77 | 7 | 26 | 18 | 7.2 | 288.6 | 8.1 | 276.2 | 9.0 | 288.7 | 25.1 | 25.4 | 24.5 | 14.8 | -0.66 | 2.76 | 0.31 |
| 77 | 7 | 26 | 19 | 8.0 | 301.6 | 10.0 | 293.6 | 11.3 | 307.7 | 24.0 | 24.9 | 23.9 | 15.4 | -0.04 | 2.76 | 0.09 |
| 77 | 7 | 26 | 20 | 9.9 | 301.4 | 13.1 | 298.0 | 14.9 | 316.2 | 21.5 | 22.7 | 22.8 | 16.7 | 1.30 | 2.76 | 0.01 |
| 77 | 7 | 26 | 21 | 10.2 | 293.4 | 13.2 | 295.0 | 14.8 | 314.5 | 20.8 | 22.0 | 23.0 | 16.9 | 2.18 | 2.76 | 0.01 |
| 77 | 7 | 26 | 22 | 10.0 | 281.8 | 10.7 | 285.1 | 11.0 | 302.2 | 22.0 | 23.0 | 22.9 | 16.5 | 0.92 | 2.76 | 0.01 |
| 77 | 7 | 26 | 23 | 8.9 | 283.9 | 9.3 | 289.2 | 9.5 | 315.1 | 21.5 | 22.3 | 22.4 | 16.6 | 0.87 | 2.76 | 0.01 |
| 77 | 7 | 26 | 24 | 9.6 | 286.1 | 11.2 | 290.8 | 11.5 | 311.3 | 21.0 | 22.2 | 22.5 | 16.9 | 1.57 | 2.76 | 0.01 |
| 77 | 7 | 27 | 1 | 10.4 | 292.6 | 13.5 | 294.4 | 14.5 | 313.3 | 20.4 | 22.1 | 22.5 | 17.1 | 2.09 | 2.76 | 0.01 |
| 77 | 7 | 27 | 2 | 8.2 | 311.0 | 10.5 | 303.6 | 11.7 | 326.3 | 20.1 | 21.2 | 21.8 | 17.2 | 1.72 | 2.76 | 0.01 |
| 77 | 7 | 27 | 3 | 3.6 | 321.4 | 3.7 | 332.0 | 3.9 | 359.1 | 20.0 | 20.2 | 20.5 | 17.5 | 0.47 | 2.76 | 0.01 |
| 77 | 7 | 27 | 4 | 5.8 | 268.5 | 5.8 | 254.8 | 6.1 | 264.3 | 19.4 | 20.1 | 20.2 | 17.5 | 0.81 | 2.76 | 0.01 |
| 77 | 7 | 27 | 5 | 8.4 | 253.9 | 9.0 | 240.8 | 9.6 | 249.1 | 19.4 | 20.1 | 20.0 | 17.6 | 0.58 | 2.76 | 0.02 |
| 77 | 7 | 27 | 6 | 10.7 | 295.9 | 13.2 | 277.6 | 12.9 | 285.1 | 19.4 | 20.3 | 20.4 | 17.4 | 0.99 | 2.76 | 0.09 |
| 77 | 7 | 27 | 7 | 12.2 | 303.3 | 14.2 | 290.3 | 16.2 | 303.9 | 19.9 | 19.9 | 19.5 | 17.1 | -0.47 | 2.76 | 0.34 |
| 77 | 7 | 27 | 8 | 9.5 | 374.7 | 11.2 | 363.2 | 12.0 | 378.0 | 19.9 | 20.1 | 19.8 | 17.0 | -0.09 | 2.76 | 0.44 |
| 77 | 7 | 27 | 9 | 9.6 | 341.3 | 11.2 | 331.6 | 12.3 | 345.8 | 19.5 | 19.5 | 19.0 | 17.2 | -0.47 | 2.76 | 0.23 |
| 77 | 7 | 27 | 10 | 16.1 | 314.3 | 20.2 | 303.0 | 23.1 | 316.5 | 16.5 | 17.2 | 17.1 | 21.1 | 0.55 | 2.76 | 0.13 |
| 77 | 7 | 27 | 11 | 5.8 | 312.8 | 6.5 | 302.3 | 7.0 | 315.7 | 19.4 | 19.9 | 19.6 | 17.6 | 0.12 | 2.76 | 0.26 |
| 77 | 7 | 27 | 12 | 6.5 | 156.0 | 7.2 | 143.4 | 7.5 | 155.3 | 20.7 | 20.6 | 20.1 | 16.5 | -0.61 | 2.76 | 0.74 |
| 77 | 7 | 27 | 13 | 7.7 | 156.8 | 8.6 | 142.6 | 9.1 | 156.7 | 21.8 | 21.7 | 21.0 | 15.5 | -0.82 | 2.76 | 0.90 |
| 77 | 7 | 27 | 14 | 5.3 | 190.6 | 5.7 | 183.9 | 6.1 | 196.4 | 22.0 | 22.1 | 21.4 | 15.7 | -0.58 | 2.76 | 0.38 |
| 77 | 7 | 27 | 15 | 5.6 | 210.2 | 6.2 | 201.9 | 6.7 | 214.5 | 22.2 | 22.1 | 21.5 | 15.7 | -0.68 | 2.76 | 0.51 |
| 77 | 7 | 27 | 16 | 7.6 | 191.7 | 9.1 | 179.5 | 9.5 | 193.6 | 22.2 | 22.0 | 21.5 | 15.9 | -0.68 | 2.76 | 0.33 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 27 | 17 | 8.1 | 243.3 | 9.2 | 228.3 | 11.1 | 237.4 | 21.2 | 21.2 | 20.7 | 16.6 | -0.50 | 2.76 | 0.08 |
| 77 | 7 | 27 | 18 | 11.3 | 293.5 | 13.0 | 286.2 | 14.0 | 306.0 | 17.5 | 17.7 | 17.6 | 19.2 | 0.06 | 2.76 | 0.10 |
| 77 | 7 | 27 | 19 | 6.0 | 244.2 | 7.5 | 226.6 | 9.6 | 229.2 | 18.5 | 18.6 | 18.3 | 18.1 | -0.16 | 2.76 | 0.03 |
| 77 | 7 | 27 | 20 | 16.6 | 350.9 | 19.7 | 338.7 | 22.4 | 351.3 | 14.1 | 13.5 | 14.0 | 40.2 | -0.08 | 2.81 | 0.03 |
| 77 | 7 | 27 | 21 | 6.7 | 194.2 | 7.9 | 164.8 | 9.0 | 158.5 | 10.4 | 12.7 | 10.7 | 56.8 | 0.29 | 2.84 | 0.02 |
| 77 | 7 | 27 | 22 | 9.3 | 266.3 | 9.9 | 249.8 | 9.6 | 255.4 | 12.6 | 13.3 | 12.7 | 50.7 | 0.06 | 2.84 | 0.01 |
| 77 | 7 | 27 | 23 | 6.2 | 281.6 | 6.1 | 278.6 | 7.1 | 302.6 | 12.9 | 13.4 | 13.4 | 49.6 | 0.49 | 2.84 | 0.01 |
| 77 | 7 | 27 | 24 | 8.9 | 254.8 | 8.7 | 234.3 | 8.5 | 229.6 | 13.7 | 14.9 | 14.8 | 37.0 | 1.15 | 2.84 | 0.01 |
| 77 | 7 | 28 | 1 | 6.5 | 202.7 | 6.8 | 183.1 | 6.6 | 181.4 | 15.1 | 15.9 | 16.2 | 23.8 | 1.09 | 2.84 | 0.01 |
| 77 | 7 | 28 | 2 | 6.5 | 229.6 | 5.6 | 212.8 | 5.5 | 233.9 | 15.2 | 15.8 | 16.2 | 22.7 | 0.98 | 2.84 | 0.01 |
| 77 | 7 | 28 | 3 | 5.6 | 236.0 | 6.4 | 290.4 | 6.1 | 290.7 | 14.4 | 15.9 | 16.3 | 22.1 | 1.90 | 2.84 | 0.01 |
| 77 | 7 | 28 | 4 | 7.1 | 274.5 | 7.9 | 265.5 | 8.6 | 284.9 | 14.3 | 15.3 | 15.5 | 21.9 | 1.19 | 2.84 | 0.01 |
| 77 | 7 | 28 | 5 | 5.9 | 331.4 | 6.8 | 327.3 | 8.6 | 349.4 | 11.7 | 12.2 | 12.3 | 35.2 | 0.52 | 2.84 | 0.01 |
| 77 | 7 | 28 | 6 | 4.1 | 221.5 | 4.4 | 222.4 | 3.8 | 234.1 | 11.6 | 12.4 | 12.1 | 36.1 | 0.49 | 2.84 | 0.10 |
| 77 | 7 | 28 | 7 | 4.5 | 200.7 | 4.7 | 194.9 | 4.9 | 212.0 | 13.4 | 13.8 | 13.1 | 27.7 | -0.28 | 2.84 | 0.38 |
| 77 | 7 | 28 | 8 | 4.4 | 172.4 | 4.6 | 164.1 | 4.5 | 184.6 | 15.9 | 16.3 | 15.4 | 21.3 | -0.54 | 2.84 | 0.68 |
| 77 | 7 | 28 | 9 | 4.3 | 143.2 | 4.4 | 137.0 | 4.5 | 156.5 | 18.0 | 18.6 | 17.4 | 18.2 | -0.64 | 2.84 | 0.94 |
| 77 | 7 | 28 | 10 | 5.3 | 73.9 | 5.7 | 55.2 | 5.9 | 81.9 | 19.0 | 19.8 | 18.6 | 17.1 | -0.45 | 2.84 | 1.15 |
| 77 | 7 | 28 | 11 | 7.8 | 266.3 | 8.2 | 236.3 | 8.7 | 306.7 | 21.3 | 21.1 | 20.4 | 16.3 | -0.89 | 2.84 | 1.31 |
| 77 | 7 | 28 | 12 | 8.4 | 299.5 | 9.0 | 272.7 | 9.4 | 290.7 | 20.9 | 21.6 | 20.3 | 15.9 | -0.63 | 2.84 | 1.37 |
| 77 | 7 | 28 | 13 | 11.2 | 289.2 | 12.3 | 275.5 | 13.1 | 285.5 | 22.7 | 22.3 | 21.8 | 15.6 | -0.82 | 2.84 | 1.36 |
| 77 | 7 | 28 | 14 | 10.9 | 308.0 | 12.1 | 292.0 | 13.2 | 306.1 | 23.6 | 22.8 | 22.5 | 15.4 | -1.09 | 2.84 | 1.30 |
| 77 | 7 | 28 | 15 | 10.8 | 321.9 | 11.6 | 306.5 | 12.4 | 317.3 | 23.9 | 23.3 | 22.9 | 15.2 | -1.03 | 2.84 | 1.13 |
| 77 | 7 | 28 | 16 | 8.9 | 299.8 | 9.8 | 287.7 | 10.6 | 302.5 | 24.2 | 23.8 | 23.3 | 15.0 | -0.97 | 2.84 | 0.90 |
| 77 | 7 | 28 | 17 | 9.5 | 327.5 | 10.2 | 313.1 | 10.9 | 322.8 | 24.1 | 23.9 | 23.3 | 15.1 | -0.79 | 2.84 | 0.61 |
| 77 | 7 | 28 | 18 | 6.1 | 336.8 | 6.6 | 322.1 | 7.1 | 334.1 | 23.9 | 24.1 | 23.3 | 15.0 | -0.64 | 2.84 | 0.32 |
| 77 | 7 | 28 | 19 | 4.3 | 310.8 | 4.4 | 302.1 | 4.6 | 316.9 | 23.2 | 23.9 | 22.9 | 15.4 | -0.21 | 2.84 | 0.07 |
| 77 | 7 | 28 | 20 | 5.4 | 302.0 | 4.0 | 308.8 | 3.5 | 332.8 | 22.0 | 22.2 | 22.6 | 16.4 | 0.55 | 2.84 | 0.01 |
| 77 | 7 | 28 | 21 | 4.7 | 296.9 | 4.3 | 299.6 | 3.6 | 332.3 | 22.1 | 22.0 | 22.5 | 16.3 | 0.35 | 2.84 | 0.00 |
| 77 | 7 | 28 | 22 | 3.2 | 260.9 | 2.8 | 265.4 | 2.0 | 289.6 | 22.3 | 21.4 | 22.4 | 16.4 | 0.12 | 2.84 | 0.00 |
| 77 | 7 | 28 | 23 | 5.5 | 253.6 | 4.7 | 230.0 | 4.4 | 235.6 | 22.4 | 22.2 | 22.3 | 16.1 | -0.01 | 2.84 | 0.00 |
| 77 | 7 | 28 | 24 | 6.3 | 248.6 | 5.9 | 225.2 | 5.8 | 225.3 | 22.0 | 22.2 | 22.2 | 16.2 | 0.20 | 2.84 | 0.00 |
| 77 | 7 | 29 | 1 | 6.9 | 245.6 | 7.5 | 217.4 | 7.8 | 207.3 | 21.2 | 21.8 | 22.1 | 16.4 | 0.83 | 2.84 | 0.00 |
| 77 | 7 | 29 | 2 | 6.7 | 242.0 | 6.5 | 222.4 | 6.5 | 216.9 | 21.4 | 21.8 | 21.9 | 16.4 | 0.48 | 2.84 | 0.00 |
| 77 | 7 | 29 | 3 | 11.3 | 266.9 | 11.4 | 248.4 | 12.2 | 250.7 | 21.0 | 22.2 | 22.5 | 16.5 | 1.43 | 2.84 | 0.00 |
| 77 | 7 | 29 | 4 | 11.7 | 264.6 | 12.6 | 246.6 | 13.8 | 245.3 | 20.5 | 21.5 | 21.9 | 16.6 | 1.42 | 2.84 | 0.00 |
| 77 | 7 | 29 | 5 | 11.0 | 271.6 | 12.1 | 243.1 | 15.7 | 234.3 | 19.1 | 20.2 | 21.7 | 17.2 | 2.55 | 2.84 | 0.01 |
| 77 | 7 | 29 | 6 | 7.1 | 257.0 | 7.9 | 230.2 | 13.5 | 235.2 | 20.4 | 20.8 | 21.1 | 16.6 | 0.73 | 2.84 | 0.11 |
| 77 | 7 | 29 | 7 | 7.8 | 217.5 | 9.5 | 212.4 | 13.5 | 231.3 | 23.0 | 23.0 | 22.4 | 15.5 | -0.60 | 2.84 | 0.38 |
| 77 | 7 | 29 | 8 | 9.5 | 212.4 | 12.3 | 202.3 | 14.5 | 225.7 | 24.9 | 24.5 | 23.9 | 14.9 | -1.03 | 2.84 | 0.68 |
| 77 | 7 | 29 | 9 | 11.2 | 229.7 | 13.3 | 220.2 | 14.9 | 240.5 | 25.4 | 24.9 | 24.4 | 14.7 | -1.01 | 2.84 | 0.79 |
| 77 | 7 | 29 | 10 | 11.3 | 256.4 | 13.0 | 242.1 | 14.9 | 255.8 | 24.3 | 23.9 | 23.4 | 15.2 | -0.82 | 2.84 | 0.76 |
| 77 | 7 | 29 | 11 | 11.3 | 246.5 | 13.0 | 229.1 | 14.9 | 243.3 | 25.7 | 25.0 | 24.7 | 14.8 | -0.98 | 2.84 | 1.09 |
| 77 | 7 | 29 | 12 | 10.5 | 262.8 | 12.0 | 249.1 | 13.5 | 258.6 | 26.0 | 25.5 | 25.1 | 14.5 | -0.89 | 2.84 | 0.86 |
| 77 | 7 | 29 | 13 | 10.8 | 254.8 | 13.3 | 237.4 | 16.6 | 243.7 | 21.0 | 21.0 | 21.2 | 17.3 | 0.21 | 3.05 | 0.27 |
| 77 | 7 | 29 | 14 | 10.1 | 231.5 | 13.2 | 215.8 | 14.6 | 227.1 | 22.1 | 22.3 | 22.1 | 16.1 | -0.07 | 3.12 | 0.55 |
| 77 | 7 | 29 | 15 | 5.5 | 389.5 | 6.0 | 376.7 | 6.7 | 397.0 | 23.4 | 23.8 | 23.2 | 14.8 | -0.28 | 3.12 | 0.78 |
| 77 | 7 | 29 | 16 | 8.7 | 220.9 | 10.4 | 203.8 | 12.1 | 216.6 | 24.3 | 24.3 | 23.8 | 14.8 | -0.53 | 3.12 | 0.50 |
| 77 | 7 | 29 | 17 | 8.2 | 201.4 | 10.6 | 190.2 | 12.4 | 207.0 | 24.6 | 24.6 | 24.2 | 14.9 | -0.38 | 3.12 | 0.37 |
| 77 | 7 | 29 | 18 | 8.4 | 261.5 | 10.5 | 246.3 | 13.5 | 256.9 | 23.1 | 23.7 | 23.5 | 15.9 | 0.38 | 3.13 | 0.07 |
| 77 | 7 | 29 | 19 | 6.1 | 238.5 | 6.5 | 137.6 | 6.6 | 131.4 | 20.9 | 21.6 | 22.0 | 16.4 | 1.15 | 3.16 | 0.08 |
| 77 | 7 | 29 | 20 | 7.7 | 219.2 | 9.6 | 204.4 | 10.3 | 197.7 | 19.3 | 20.2 | 20.3 | 17.1 | 0.95 | 3.16 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 7 | 29 | 21 | 7.2 | 242.3 | 8.4 | 215.1 | 9.3 | 202.3 | 19.5 | 20.2 | 20.3 | 16.9 | 0.84 | 3.15 | 0.01 |
| 77 | 7 | 29 | 22 | 10.1 | 267.3 | 11.2 | 246.1 | 13.5 | 235.3 | 20.5 | 21.3 | 21.7 | 16.4 | 1.23 | 3.16 | 0.01 |
| 77 | 7 | 29 | 23 | 9.8 | 260.7 | 11.0 | 250.0 | 12.3 | 248.8 | 21.4 | 22.3 | 22.5 | 15.9 | 1.10 | 3.16 | 0.01 |
| 77 | 7 | 29 | 24 | 3.1 | 242.1 | 3.2 | 24.4 | 5.2 | 47.8 | 18.0 | 17.8 | 18.8 | 17.6 | 0.83 | 3.16 | 0.01 |
| 77 | 7 | 30 | 1 | 5.1 | 295.6 | 3.8 | 311.1 | 2.5 | 374.4 | 18.8 | 18.8 | 19.5 | 17.3 | 0.69 | 3.16 | 0.00 |
| 77 | 7 | 30 | 2 | 4.4 | 301.0 | 3.5 | 309.0 | 2.0 | 318.2 | 19.1 | 19.1 | 19.8 | 17.1 | 0.61 | 3.16 | 0.00 |
| 77 | 7 | 30 | 3 | 2.4 | 278.1 | 2.3 | 319.1 | 2.6 | 394.6 | 18.5 | 17.3 | 18.9 | 17.6 | 0.44 | 3.16 | 0.00 |
| 77 | 7 | 30 | 4 | 4.2 | 300.3 | 3.8 | 319.9 | 4.1 | 364.0 | 18.6 | 18.5 | 19.1 | 17.4 | 0.49 | 3.16 | 0.00 |
| 77 | 7 | 30 | 5 | 4.7 | 302.1 | 4.0 | 316.8 | 4.0 | 362.4 | 18.6 | 18.6 | 18.8 | 17.2 | 0.28 | 3.16 | 0.01 |
| 77 | 7 | 30 | 6 | 4.8 | 321.0 | 5.2 | 336.9 | 6.8 | 374.0 | 17.5 | 17.8 | 17.9 | 17.4 | 0.44 | 3.16 | 0.08 |
| 77 | 7 | 30 | 7 | 3.9 | 350.0 | 4.2 | 342.7 | 4.7 | 356.9 | 18.1 | 18.5 | 17.8 | 16.7 | -0.37 | 3.16 | 0.37 |
| 77 | 7 | 30 | 8 | 3.8 | 64.0 | 4.3 | 57.3 | 4.7 | 62.5 | 19.4 | 19.9 | 19.0 | 15.8 | -0.46 | 3.16 | 0.66 |
| 77 | 7 | 30 | 9 | 4.6 | 94.8 | 5.0 | 87.5 | 5.5 | 92.6 | 20.3 | 20.6 | 19.7 | 15.5 | -0.57 | 3.16 | 0.94 |
| 77 | 7 | 30 | 10 | 5.8 | 137.1 | 6.3 | 126.1 | 6.6 | 132.0 | 21.6 | 21.6 | 20.9 | 14.8 | -0.67 | 3.16 | 1.16 |
| 77 | 7 | 30 | 11 | 11.0 | 272.2 | 12.1 | 263.6 | 13.2 | 266.4 | 23.2 | 22.5 | 22.1 | 14.9 | -1.02 | 3.16 | 1.35 |
| 77 | 7 | 30 | 12 | 14.8 | 269.2 | 16.8 | 261.3 | 18.5 | 268.5 | 23.9 | 22.9 | 22.8 | 14.7 | -1.07 | 3.16 | 1.43 |
| 77 | 7 | 30 | 13 | 17.0 | 279.9 | 19.2 | 272.5 | 21.0 | 278.3 | 24.6 | 23.5 | 23.5 | 14.6 | -1.14 | 3.16 | 1.41 |
| 77 | 7 | 30 | 14 | 17.6 | 283.1 | 20.2 | 274.9 | 22.2 | 281.2 | 25.4 | 24.4 | 24.3 | 14.3 | -1.13 | 3.16 | 1.32 |
| 77 | 7 | 30 | 15 | 18.2 | 286.0 | 21.1 | 278.0 | 23.1 | 284.6 | 25.8 | 24.8 | 24.8 | 14.2 | -1.04 | 3.16 | 1.15 |
| 77 | 7 | 30 | 16 | 16.1 | 295.1 | 18.1 | 287.0 | 19.7 | 293.3 | 25.9 | 25.2 | 24.8 | 14.1 | -1.01 | 3.16 | 0.91 |
| 77 | 7 | 30 | 17 | 16.7 | 305.3 | 19.4 | 296.7 | 21.4 | 302.4 | 25.8 | 25.3 | 25.0 | 14.2 | -0.81 | 3.16 | 0.63 |
| 77 | 7 | 30 | 18 | 13.0 | 301.7 | 15.2 | 293.8 | 16.9 | 300.9 | 25.2 | 25.3 | 24.6 | 14.3 | -0.55 | 3.16 | 0.34 |
| 77 | 7 | 30 | 19 | 9.6 | 279.3 | 12.0 | 277.1 | 13.7 | 286.1 | 23.8 | 24.6 | 24.1 | 14.9 | 0.29 | 3.16 | 0.08 |
| 77 | 7 | 30 | 20 | 11.7 | 276.1 | 14.5 | 273.9 | 16.0 | 284.0 | 22.6 | 23.5 | 23.4 | 15.5 | 0.74 | 3.16 | 0.01 |
| 77 | 7 | 30 | 21 | 9.9 | 292.6 | 14.0 | 288.6 | 17.4 | 298.2 | 20.6 | 21.7 | 21.9 | 16.1 | 1.37 | 3.16 | 0.01 |
| 77 | 7 | 30 | 22 | 4.5 | 367.5 | 5.8 | 364.2 | 7.5 | 379.4 | 19.7 | 20.1 | 20.4 | 16.8 | 0.73 | 3.16 | 0.00 |
| 77 | 7 | 30 | 23 | 4.6 | 317.8 | 5.4 | 355.5 | 7.8 | 33.1 | 19.3 | 19.3 | 20.3 | 16.9 | 1.00 | 3.16 | 0.00 |
| 77 | 7 | 30 | 24 | 5.0 | 319.0 | 5.8 | 355.8 | 8.8 | 37.5 | 17.5 | 18.1 | 18.9 | 17.5 | 1.38 | 3.16 | 0.00 |
| 77 | 7 | 31 | 1 | 5.0 | 314.5 | 5.1 | 345.1 | 7.0 | 27.9 | 17.0 | 17.3 | 17.9 | 17.7 | 0.90 | 3.16 | 0.00 |
| 77 | 7 | 31 | 2 | 6.3 | 300.4 | 5.5 | 320.5 | 5.6 | 362.5 | 16.3 | 16.7 | 17.1 | 17.9 | 0.76 | 3.16 | 0.00 |
| 77 | 7 | 31 | 3 | 6.2 | 310.8 | 7.0 | 349.6 | 8.9 | 22.5 | 14.5 | 15.8 | 16.5 | 18.5 | 1.93 | 3.16 | 0.00 |
| 77 | 7 | 31 | 4 | 2.9 | 290.0 | 2.4 | 334.9 | 4.0 | 385.7 | 15.0 | 14.1 | 15.5 | 18.8 | 0.52 | 3.16 | 0.00 |
| 77 | 7 | 31 | 5 | 3.7 | 288.8 | 3.4 | 305.2 | 3.4 | 366.0 | 14.8 | 14.3 | 15.2 | 18.8 | 0.47 | 3.16 | 0.01 |
| 77 | 7 | 31 | 6 | 4.1 | 275.8 | 4.2 | 296.3 | 4.4 | 344.7 | 15.1 | 15.3 | 15.4 | 18.1 | 0.37 | 3.16 | 0.12 |
| 77 | 7 | 31 | 7 | 4.8 | 364.8 | 5.3 | 361.0 | 5.6 | 374.5 | 16.6 | 16.7 | 16.1 | 17.2 | -0.55 | 3.16 | 0.39 |
| 77 | 7 | 31 | 8 | 5.2 | 45.1 | 5.7 | 38.9 | 6.1 | 45.2 | 17.5 | 17.8 | 16.9 | 16.7 | -0.56 | 3.16 | 0.69 |
| 77 | 7 | 31 | 9 | 6.0 | 44.1 | 6.6 | 36.2 | 6.9 | 46.4 | 18.7 | 18.8 | 18.1 | 16.3 | -0.69 | 3.16 | 0.96 |
| 77 | 7 | 31 | 10 | 6.1 | 57.0 | 6.6 | 49.2 | 6.7 | 54.4 | 19.9 | 19.8 | 19.1 | 15.7 | -0.77 | 3.16 | 1.18 |
| 77 | 7 | 31 | 11 | 6.9 | 38.7 | 7.6 | 29.7 | 7.9 | 36.1 | 21.0 | 20.9 | 20.2 | 15.3 | -0.78 | 3.16 | 1.33 |
| 77 | 7 | 31 | 12 | 8.1 | 387.0 | 8.7 | 373.0 | 9.0 | 382.5 | 22.2 | 21.9 | 21.3 | 14.8 | -0.91 | 3.16 | 1.39 |
| 77 | 7 | 31 | 13 | 8.3 | 351.3 | 8.9 | 346.8 | 9.1 | 358.3 | 23.0 | 22.6 | 22.1 | 14.7 | -0.98 | 3.16 | 1.39 |
| 77 | 7 | 31 | 14 | 10.5 | 323.8 | 11.2 | 317.8 | 11.9 | 325.4 | 23.8 | 23.1 | 22.6 | 14.6 | -1.13 | 3.16 | 1.30 |
| 77 | 7 | 31 | 15 | 9.0 | 323.3 | 9.5 | 312.3 | 10.0 | 318.9 | 24.1 | 23.6 | 23.1 | 14.4 | -1.07 | 3.16 | 1.13 |
| 77 | 7 | 31 | 16 | 7.9 | 317.0 | 8.6 | 309.3 | 9.2 | 315.0 | 24.2 | 23.9 | 23.3 | 14.3 | -0.88 | 3.16 | 0.91 |
| 77 | 7 | 31 | 17 | 8.6 | 306.3 | 9.5 | 295.4 | 10.2 | 300.1 | 24.2 | 24.0 | 23.4 | 14.3 | -0.75 | 3.16 | 0.62 |
| 77 | 7 | 31 | 18 | 8.2 | 307.3 | 9.5 | 297.0 | 10.2 | 303.0 | 23.7 | 23.8 | 23.1 | 14.6 | -0.62 | 3.16 | 0.33 |
| 77 | 7 | 31 | 19 | 8.9 | 310.1 | 9.3 | 311.9 | 9.9 | 321.0 | 22.2 | 23.1 | 22.7 | 15.4 | 0.46 | 3.16 | 0.08 |
| 77 | 7 | 31 | 20 | 9.5 | 290.0 | 10.2 | 301.5 | 10.2 | 316.3 | 21.0 | 22.4 | 22.4 | 16.1 | 1.45 | 3.16 | 0.01 |
| 77 | 7 | 31 | 21 | 9.5 | 292.1 | 10.3 | 303.7 | 10.6 | 323.3 | 20.5 | 21.9 | 22.3 | 16.2 | 1.78 | 3.15 | 0.00 |
| 77 | 7 | 31 | 22 | 9.5 | 298.2 | 10.8 | 309.0 | 11.7 | 335.1 | 19.8 | 21.1 | 22.1 | 16.5 | 2.33 | 3.16 | 0.00 |
| 77 | 7 | 31 | 23 | 7.1 | 301.4 | 7.5 | 313.5 | 8.2 | 351.5 | 20.4 | 21.1 | 22.0 | 16.4 | 1.59 | 3.16 | 0.00 |
| 77 | 7 | 31 | 24 | 8.8 | 315.6 | 10.2 | 325.3 | 11.3 | 352.9 | 19.6 | 20.7 | 21.2 | 16.5 | 1.64 | 3.16 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 1 | 1 | 8.4 | 329.6 | 11.9 | 348.9 | 14.3 | 7.5 | 16.9 | 19.1 | 19.8 | 17.5 | 2.92 | 3.16 | 0.00 |
| 77 | 8 | 1 | 2 | 8.4 | 318.3 | 11.0 | 342.3 | 13.3 | 367.4 | 16.0 | 18.0 | 18.7 | 17.9 | 2.68 | 3.16 | 0.00 |
| 77 | 8 | 1 | 3 | 6.9 | 300.9 | 7.8 | 322.9 | 8.8 | 354.5 | 15.8 | 17.0 | 17.8 | 18.1 | 1.94 | 3.16 | 0.00 |
| 77 | 8 | 1 | 4 | 4.1 | 293.8 | 3.4 | 317.1 | 2.4 | 35.1 | 17.0 | 16.9 | 17.7 | 17.8 | 0.66 | 3.16 | 0.00 |
| 77 | 8 | 1 | 5 | 2.2 | 201.4 | 1.9 | 189.5 | 3.3 | 110.7 | 16.9 | 15.6 | 17.3 | 18.3 | 0.37 | 3.16 | 0.01 |
| 77 | 8 | 1 | 6 | 1.0 | 240.0 | 1.4 | 165.0 | 2.0 | 111.1 | 17.3 | 17.2 | 17.4 | 17.3 | 0.07 | 3.16 | 0.12 |
| 77 | 8 | 1 | 7 | 3.1 | 163.2 | 3.1 | 153.3 | 3.5 | 146.4 | 18.1 | 18.8 | 17.7 | 15.9 | -0.43 | 3.16 | 0.38 |
| 77 | 8 | 1 | 8 | 5.5 | 81.4 | 5.8 | 76.4 | 6.3 | 88.5 | 19.1 | 19.4 | 18.6 | 15.8 | -0.51 | 3.16 | 0.68 |
| 77 | 8 | 1 | 9 | 6.7 | 73.3 | 7.6 | 61.5 | 8.4 | 72.5 | 20.2 | 20.2 | 19.5 | 15.7 | -0.70 | 3.16 | 0.96 |
| 77 | 8 | 1 | 10 | 8.5 | 69.3 | 9.6 | 61.9 | 10.6 | 67.0 | 21.1 | 20.9 | 20.3 | 15.3 | -0.85 | 3.16 | 1.18 |
| 77 | 8 | 1 | 11 | 8.6 | 383.2 | 9.3 | 379.2 | 9.4 | 390.5 | 21.9 | 21.6 | 21.0 | 15.2 | -0.85 | 3.16 | 1.33 |
| 77 | 8 | 1 | 12 | 7.1 | 351.6 | 7.5 | 339.7 | 7.3 | 63.2 | 23.0 | 22.6 | 22.1 | 14.6 | -0.85 | 3.16 | 1.39 |
| 77 | 8 | 1 | 13 | 7.3 | 325.3 | 7.9 | 315.5 | 8.3 | 324.2 | 24.2 | 23.7 | 23.2 | 14.0 | -0.97 | 3.16 | 1.37 |
| 77 | 8 | 1 | 14 | 9.5 | 334.4 | 10.3 | 324.5 | 10.9 | 324.9 | 24.7 | 24.1 | 23.7 | 14.2 | -1.01 | 3.16 | 1.30 |
| 77 | 8 | 1 | 15 | 9.3 | 329.5 | 10.2 | 316.1 | 11.0 | 324.7 | 24.9 | 24.4 | 23.9 | 14.2 | -0.99 | 3.16 | 1.11 |
| 77 | 8 | 1 | 16 | 8.2 | 343.3 | 9.1 | 337.3 | 9.4 | 344.2 | 25.3 | 25.0 | 24.4 | 14.0 | -0.96 | 3.16 | 0.87 |
| 77 | 8 | 1 | 17 | 8.0 | 333.7 | 8.9 | 322.7 | 9.5 | 327.2 | 25.4 | 25.2 | 24.6 | 14.0 | -0.85 | 3.16 | 0.61 |
| 77 | 8 | 1 | 18 | 6.4 | 314.3 | 7.3 | 304.2 | 8.2 | 319.9 | 24.6 | 24.7 | 24.1 | 14.3 | -0.44 | 3.16 | 0.24 |
| 77 | 8 | 1 | 19 | 7.6 | 298.4 | 8.9 | 301.2 | 9.6 | 313.3 | 23.5 | 24.3 | 23.8 | 14.9 | 0.34 | 3.16 | 0.08 |
| 77 | 8 | 1 | 20 | 6.9 | 288.4 | 6.5 | 286.0 | 6.4 | 297.9 | 23.7 | 23.8 | 23.7 | 15.1 | -0.04 | 3.16 | 0.01 |
| 77 | 8 | 1 | 21 | 5.0 | 277.5 | 4.6 | 274.6 | 4.3 | 285.9 | 23.7 | 23.5 | 23.6 | 15.2 | -0.14 | 3.16 | 0.00 |
| 77 | 8 | 1 | 22 | 6.7 | 266.3 | 6.0 | 270.3 | 5.7 | 290.8 | 23.5 | 23.5 | 23.5 | 15.2 | -0.05 | 3.16 | 0.00 |
| 77 | 8 | 1 | 23 | 9.1 | 298.0 | 8.6 | 313.0 | 8.2 | 332.0 | 22.2 | 23.4 | 23.5 | 15.5 | 1.24 | 3.16 | 0.00 |
| 77 | 8 | 1 | 24 | 11.3 | 311.8 | 13.3 | 318.3 | 14.7 | 337.2 | 20.5 | 22.3 | 22.7 | 16.1 | 2.26 | 3.16 | 0.00 |
| 77 | 8 | 2 | 1 | 9.6 | 327.3 | 12.6 | 327.8 | 15.4 | 348.6 | 18.9 | 20.6 | 21.3 | 16.8 | 2.44 | 3.16 | 0.00 |
| 77 | 8 | 2 | 2 | 8.2 | 316.0 | 9.8 | 343.7 | 12.5 | 11.4 | 17.5 | 19.7 | 20.6 | 17.3 | 3.10 | 3.16 | 0.00 |
| 77 | 8 | 2 | 3 | 7.2 | 311.0 | 7.7 | 336.1 | 9.3 | 13.7 | 18.0 | 19.2 | 19.9 | 17.2 | 1.85 | 3.16 | 0.00 |
| 77 | 8 | 2 | 4 | 5.6 | 303.0 | 5.6 | 326.6 | 6.9 | 18.4 | 18.1 | 18.6 | 19.3 | 17.2 | 1.21 | 3.16 | 0.00 |
| 77 | 8 | 2 | 5 | 2.8 | 260.8 | 2.4 | 272.2 | 1.7 | 267.2 | 18.9 | 17.8 | 19.3 | 17.3 | 0.35 | 3.16 | 0.01 |
| 77 | 8 | 2 | 6 | 3.4 | 240.0 | 2.9 | 232.1 | 2.8 | 214.4 | 19.6 | 19.0 | 19.6 | 16.7 | 0.00 | 3.16 | 0.12 |
| 77 | 8 | 2 | 7 | 4.4 | 299.7 | 4.5 | 282.2 | 4.7 | 273.0 | 20.7 | 21.0 | 20.3 | 15.6 | -0.39 | 3.16 | 0.38 |
| 77 | 8 | 2 | 8 | 5.6 | 60.9 | 6.1 | 51.2 | 6.4 | 55.8 | 21.8 | 22.0 | 21.3 | 15.0 | -0.54 | 3.16 | 0.68 |
| 77 | 8 | 2 | 9 | 5.8 | 76.0 | 6.4 | 68.6 | 6.9 | 74.8 | 22.5 | 22.5 | 21.9 | 14.7 | -0.62 | 3.16 | 0.94 |
| 77 | 8 | 2 | 10 | 5.9 | 76.9 | 6.2 | 67.7 | 6.8 | 75.6 | 23.6 | 23.5 | 22.9 | 14.1 | -0.62 | 3.16 | 1.16 |
| 77 | 8 | 2 | 11 | 7.6 | 121.1 | 8.6 | 111.0 | 8.7 | 115.2 | 24.9 | 24.5 | 24.0 | 13.6 | -0.90 | 3.16 | 1.31 |
| 77 | 8 | 2 | 12 | 7.5 | 290.1 | 7.9 | 282.9 | 8.1 | 289.5 | 25.8 | 25.3 | 24.9 | 13.5 | -0.93 | 3.16 | 1.37 |
| 77 | 8 | 2 | 13 | 9.6 | 321.4 | 10.9 | 310.8 | 11.6 | 320.4 | 26.8 | 26.0 | 25.6 | 13.4 | -1.27 | 3.16 | 1.36 |
| 77 | 8 | 2 | 14 | 9.7 | 331.4 | 10.7 | 319.3 | 11.4 | 324.2 | 26.8 | 26.1 | 25.6 | 13.5 | -1.13 | 3.16 | 1.22 |
| 77 | 8 | 2 | 15 | 11.5 | 328.3 | 12.9 | 317.4 | 13.6 | 323.2 | 26.9 | 26.2 | 25.8 | 13.6 | -1.11 | 3.16 | 0.92 |
| 77 | 8 | 2 | 16 | 9.8 | 308.9 | 10.7 | 301.8 | 11.4 | 307.1 | 26.8 | 26.4 | 25.9 | 13.6 | -0.93 | 3.16 | 0.78 |
| 77 | 8 | 2 | 17 | 9.8 | 305.6 | 11.0 | 297.5 | 11.8 | 305.0 | 26.4 | 26.2 | 25.7 | 13.8 | -0.75 | 3.16 | 0.42 |
| 77 | 8 | 2 | 18 | 6.1 | 280.3 | 7.1 | 271.3 | 7.8 | 279.1 | 26.3 | 26.2 | 25.7 | 13.8 | -0.53 | 3.16 | 0.24 |
| 77 | 8 | 2 | 19 | 7.6 | 280.8 | 9.0 | 284.8 | 9.8 | 298.1 | 25.0 | 25.7 | 25.4 | 14.5 | 0.41 | 3.16 | 0.06 |
| 77 | 8 | 2 | 20 | 8.3 | 286.2 | 8.5 | 291.4 | 8.3 | 300.8 | 24.8 | 25.4 | 25.3 | 14.6 | 0.45 | 3.16 | 0.01 |
| 77 | 8 | 2 | 21 | 6.2 | 282.1 | 5.6 | 285.6 | 5.4 | 295.8 | 25.2 | 25.3 | 25.2 | 14.5 | 0.00 | 3.16 | 0.01 |
| 77 | 8 | 2 | 22 | 7.1 | 296.0 | 7.1 | 294.1 | 7.3 | 305.6 | 25.1 | 25.3 | 25.2 | 14.5 | 0.11 | 3.16 | 0.00 |
| 77 | 8 | 2 | 23 | 7.6 | 304.6 | 8.9 | 316.4 | 10.0 | 338.1 | 23.2 | 24.1 | 24.5 | 15.1 | 1.33 | 3.16 | 0.00 |
| 77 | 8 | 2 | 24 | 4.0 | 252.1 | 4.5 | 365.9 | 6.5 | 371.0 | 21.7 | 21.7 | 22.0 | 15.7 | 0.37 | 3.16 | 0.00 |
| 77 | 8 | 3 | 1 | 6.0 | 304.6 | 6.6 | 320.4 | 8.0 | 359.7 | 20.5 | 20.9 | 21.2 | 16.1 | 0.71 | 3.16 | 0.00 |
| 77 | 8 | 3 | 2 | 4.3 | 308.1 | 4.6 | 339.4 | 7.0 | 31.3 | 20.2 | 20.0 | 21.0 | 16.5 | 0.80 | 3.16 | 0.00 |
| 77 | 8 | 3 | 3 | 2.6 | 235.1 | 2.2 | 220.6 | 2.2 | 173.2 | 20.6 | 19.3 | 20.7 | 16.6 | 0.16 | 3.16 | 0.00 |
| 77 | 8 | 3 | 4 | 5.9 | 230.8 | 5.4 | 209.4 | 5.4 | 198.3 | 20.6 | 20.6 | 20.8 | 16.3 | 0.19 | 3.16 | 0.00 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 3 | 5 | 7.3 | 242.0 | 7.4 | 219.3 | 6.8 | 203.3 | 20.6 | 21.0 | 21.1 | 16.1 | 0.53 | 3.16 | 0.01 |
| 77 | 8 | 3 | 6 | 6.8 | 245.0 | 7.0 | 222.4 | 6.6 | 207.1 | 21.0 | 21.6 | 21.6 | 15.9 | 0.59 | 3.16 | 0.11 |
| 77 | 8 | 3 | 7 | 4.0 | 161.9 | 4.1 | 155.0 | 4.6 | 159.8 | 22.2 | 22.6 | 21.9 | 14.8 | -0.28 | 3.16 | 0.36 |
| 77 | 8 | 3 | 8 | 4.6 | 77.3 | 4.9 | 70.1 | 5.2 | 73.8 | 21.9 | 22.4 | 21.9 | 14.8 | -0.06 | 3.16 | 0.65 |
| 77 | 8 | 3 | 9 | 11.4 | 262.8 | 12.0 | 249.2 | 13.7 | 250.0 | 25.5 | 25.1 | 24.6 | 14.1 | -0.90 | 3.16 | 0.94 |
| 77 | 8 | 3 | 10 | 12.3 | 258.0 | 13.8 | 246.5 | 16.4 | 251.0 | 25.3 | 24.8 | 24.5 | 14.2 | -0.84 | 3.16 | 0.73 |
| 77 | 8 | 3 | 11 | 11.4 | 258.8 | 12.8 | 248.3 | 14.5 | 255.2 | 26.5 | 25.8 | 25.4 | 13.7 | -1.05 | 3.16 | 1.03 |
| 77 | 8 | 3 | 12 | 11.8 | 271.4 | 13.4 | 265.2 | 15.3 | 273.3 | 27.4 | 26.5 | 26.3 | 13.2 | -1.10 | 3.16 | 1.35 |
| 77 | 8 | 3 | 13 | 14.5 | 288.3 | 16.2 | 277.0 | 17.6 | 281.8 | 28.4 | 27.3 | 27.1 | 13.0 | -1.31 | 3.16 | 1.39 |
| 77 | 8 | 3 | 14 | 16.4 | 300.6 | 18.4 | 291.0 | 19.9 | 298.1 | 28.1 | 27.2 | 27.0 | 13.3 | -1.16 | 3.16 | 0.96 |
| 77 | 8 | 3 | 15 | 12.5 | 268.8 | 14.0 | 259.4 | 15.3 | 263.9 | 27.0 | 26.6 | 26.2 | 13.7 | -0.79 | 3.16 | 0.43 |
| 77 | 8 | 3 | 16 | 12.4 | 267.1 | 14.6 | 259.1 | 16.5 | 263.9 | 25.4 | 25.2 | 24.9 | 14.3 | -0.58 | 3.16 | 0.25 |
| 77 | 8 | 3 | 17 | 11.7 | 303.5 | 13.4 | 295.7 | 14.3 | 302.4 | 25.5 | 25.2 | 24.8 | 14.2 | -0.68 | 3.16 | 0.36 |
| 77 | 8 | 3 | 18 | 7.1 | 298.8 | 8.2 | 289.6 | 9.3 | 294.6 | 25.0 | 25.1 | 24.5 | 14.2 | -0.49 | 3.16 | 0.23 |
| 77 | 8 | 3 | 19 | 7.4 | 312.9 | 9.0 | 310.9 | 10.2 | 321.8 | 23.4 | 23.8 | 23.6 | 15.1 | 0.21 | 3.16 | 0.04 |
| 77 | 8 | 3 | 20 | 7.2 | 311.5 | 9.1 | 321.7 | 10.3 | 343.0 | 21.6 | 22.4 | 22.7 | 15.8 | 1.04 | 3.16 | 0.01 |
| 77 | 8 | 3 | 21 | 4.3 | 359.4 | 5.5 | 370.1 | 6.5 | 389.2 | 21.1 | 21.4 | 21.4 | 16.0 | 0.27 | 3.16 | 0.01 |
| 77 | 8 | 3 | 22 | 4.8 | 253.7 | 5.1 | 258.9 | 5.2 | 442.2 | 19.7 | 20.2 | 20.5 | 16.5 | 0.77 | 3.16 | 0.00 |
| 77 | 8 | 3 | 23 | 3.8 | 218.0 | 4.1 | 194.8 | 4.5 | 177.6 | 19.4 | 19.5 | 19.8 | 16.7 | 0.38 | 3.16 | 0.00 |
| 77 | 8 | 3 | 24 | 5.1 | 223.6 | 5.0 | 197.9 | 4.3 | 173.1 | 19.3 | 19.4 | 19.5 | 16.7 | 0.21 | 3.16 | 0.00 |
| 77 | 8 | 4 | 1 | 5.1 | 235.7 | 3.9 | 205.5 | 3.4 | 190.0 | 19.6 | 19.5 | 19.6 | 16.6 | 0.01 | 3.16 | 0.00 |
| 77 | 8 | 4 | 2 | 3.7 | 242.6 | 2.9 | 226.8 | 2.5 | 205.5 | 19.6 | 19.4 | 19.8 | 16.7 | 0.15 | 3.16 | 0.00 |
| 77 | 8 | 4 | 3 | 2.9 | 264.4 | 1.8 | 253.7 | 1.2 | 205.8 | 19.8 | 18.2 | 19.8 | 16.8 | 0.01 | 3.16 | 0.00 |
| 77 | 8 | 4 | 4 | 2.9 | 275.3 | 2.5 | 290.5 | 1.9 | 352.4 | 19.4 | 18.8 | 19.7 | 17.0 | 0.28 | 3.16 | 0.00 |
| 77 | 8 | 4 | 5 | 2.9 | 279.3 | 2.4 | 290.8 | 2.0 | 94.6 | 18.4 | 17.5 | 18.9 | 17.4 | 0.54 | 3.16 | 0.01 |
| 77 | 8 | 4 | 6 | 2.0 | 238.3 | 1.9 | 251.0 | 1.7 | 194.4 | 18.2 | 18.3 | 18.5 | 17.0 | 0.32 | 3.16 | 0.08 |
| 77 | 8 | 4 | 7 | 2.6 | 187.0 | 3.2 | 175.8 | 3.6 | 179.0 | 19.0 | 19.5 | 18.8 | 16.1 | -0.25 | 3.16 | 0.34 |
| 77 | 8 | 4 | 8 | 5.4 | 128.3 | 6.1 | 121.9 | 6.4 | 132.0 | 20.8 | 21.0 | 20.3 | 15.0 | -0.59 | 3.16 | 0.59 |
| 77 | 8 | 4 | 9 | 6.2 | 97.8 | 7.0 | 90.9 | 7.8 | 103.8 | 21.4 | 21.3 | 20.7 | 14.9 | -0.66 | 3.16 | 0.57 |
| 77 | 8 | 4 | 10 | 8.1 | 76.9 | 9.0 | 67.9 | 9.7 | 78.0 | 21.9 | 21.7 | 21.1 | 14.8 | -0.79 | 3.16 | 0.91 |
| 77 | 8 | 4 | 11 | 8.0 | 56.6 | 8.8 | 47.5 | 9.4 | 56.0 | 22.2 | 22.0 | 21.4 | 14.9 | -0.78 | 3.16 | 0.57 |
| 77 | 8 | 4 | 12 | 7.2 | 351.5 | 7.5 | 342.9 | 7.9 | 355.6 | 22.6 | 22.5 | 21.8 | 14.9 | -0.87 | 3.16 | 0.83 |
| 77 | 8 | 4 | 13 | 10.8 | 369.2 | 11.8 | 361.1 | 12.4 | 369.1 | 22.5 | 22.3 | 21.7 | 15.2 | -0.82 | 3.16 | 0.55 |
| 77 | 8 | 4 | 14 | 13.2 | 23.5 | 14.6 | 376.0 | 15.0 | 22.1 | 22.7 | 22.3 | 21.7 | 15.1 | -0.98 | 3.16 | 0.87 |
| 77 | 8 | 4 | 15 | 14.8 | 347.5 | 16.5 | 337.9 | 17.6 | 342.5 | 21.6 | 21.3 | 20.8 | 15.7 | -0.82 | 3.16 | 0.38 |
| 77 | 8 | 4 | 16 | 15.9 | 339.9 | 17.6 | 331.4 | 18.3 | 338.6 | 20.5 | 20.2 | 19.7 | 16.2 | -0.77 | 3.16 | 0.50 |
| 77 | 8 | 4 | 17 | 9.1 | 344.2 | 9.9 | 336.3 | 10.4 | 347.8 | 21.6 | 21.4 | 20.7 | 15.5 | -0.83 | 3.16 | 0.49 |
| 77 | 8 | 4 | 18 | 4.9 | 67.6 | 5.6 | 372.8 | 5.9 | 370.7 | 21.0 | 21.0 | 20.5 | 15.6 | -0.51 | 3.16 | 0.13 |
| 77 | 8 | 4 | 19 | 3.6 | 36.7 | 4.7 | 35.4 | 5.7 | 49.4 | 20.0 | 20.0 | 19.8 | 16.5 | -0.24 | 3.16 | 0.03 |
| 77 | 8 | 4 | 20 | 6.3 | 225.0 | 6.5 | 198.8 | 7.0 | 187.1 | 19.3 | 19.3 | 19.2 | 16.8 | -0.15 | 3.16 | 0.01 |
| 77 | 8 | 4 | 21 | 9.1 | 250.8 | 10.4 | 234.5 | 14.4 | 234.1 | 16.4 | 16.6 | 16.4 | 22.0 | 0.03 | 3.16 | 0.00 |
| 77 | 8 | 4 | 22 | 8.9 | 289.5 | 9.6 | 280.8 | 9.6 | 287.6 | 15.5 | 16.3 | 16.3 | 28.1 | 0.76 | 3.20 | 0.01 |
| 77 | 8 | 4 | 23 | 8.6 | 302.5 | 10.1 | 305.3 | 11.5 | 325.6 | 12.8 | 13.4 | 13.6 | 52.2 | 0.81 | 3.49 | 0.02 |
| 77 | 8 | 4 | 24 | 4.5 | 238.4 | 5.4 | 240.8 | 5.8 | 264.9 | 12.7 | 14.0 | 14.0 | 49.7 | 1.27 | 3.60 | 0.01 |
| 77 | 8 | 5 | 1 | 3.1 | 384.8 | 3.5 | 383.3 | 4.2 | 404.7 | 12.8 | 13.0 | 13.1 | 55.1 | 0.37 | 3.64 | 0.02 |
| 77 | 8 | 5 | 2 | 4.7 | 293.4 | 4.6 | 300.6 | 4.8 | 331.1 | 13.1 | 13.4 | 13.4 | 53.4 | 0.39 | 3.64 | 0.01 |
| 77 | 8 | 5 | 3 | 7.6 | 290.0 | 9.3 | 287.2 | 11.0 | 299.4 | 12.8 | 13.4 | 13.3 | 50.2 | 0.45 | 3.64 | 0.01 |
| 77 | 8 | 5 | 4 | 7.4 | 297.9 | 10.2 | 295.2 | 12.9 | 305.1 | 12.1 | 12.6 | 12.5 | 55.9 | 0.41 | 3.64 | 0.01 |
| 77 | 8 | 5 | 5 | 2.8 | 217.3 | 2.9 | 295.5 | 3.0 | 308.1 | 11.6 | 11.7 | 11.7 | 64.8 | 0.17 | 3.64 | 0.01 |
| 77 | 8 | 5 | 6 | 4.3 | 244.3 | 4.5 | 237.8 | 4.2 | 239.8 | 11.7 | 12.1 | 12.0 | 64.6 | 0.23 | 3.64 | 0.03 |
| 77 | 8 | 5 | 7 | 4.1 | 204.9 | 4.5 | 199.3 | 4.9 | 201.8 | 12.7 | 13.1 | 12.6 | 54.6 | -0.05 | 3.64 | 0.26 |
| 77 | 8 | 5 | 8 | 3.5 | 102.4 | 3.7 | 88.9 | 3.9 | 98.5 | 14.2 | 15.1 | 13.8 | 37.5 | -0.45 | 3.64 | 0.57 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 5 | 9 | 4.7 | 82.7 | 5.0 | 76.4 | 5.4 | 82.2 | 15.1 | 15.6 | 14.6 | 35.0 | -0.53 | 3.64 | 0.83 |
| 77 | 8 | 5 | 10 | 5.6 | 392.9 | 6.2 | 389.9 | 6.3 | 399.8 | 16.3 | 16.5 | 15.8 | 33.8 | -0.59 | 3.64 | 0.75 |
| 77 | 8 | 5 | 11 | 9.8 | 273.3 | 10.8 | 262.7 | 11.7 | 269.4 | 18.6 | 18.2 | 17.6 | 21.9 | -0.98 | 3.64 | 1.18 |
| 77 | 8 | 5 | 12 | 13.0 | 275.2 | 14.7 | 266.0 | 16.1 | 272.7 | 19.9 | 19.2 | 18.8 | 17.8 | -1.06 | 3.64 | 1.34 |
| 77 | 8 | 5 | 13 | 11.5 | 289.6 | 13.2 | 282.5 | 14.1 | 288.5 | 20.9 | 20.1 | 19.7 | 16.6 | -1.16 | 3.64 | 1.32 |
| 77 | 8 | 5 | 14 | 10.2 | 241.0 | 12.1 | 233.5 | 13.0 | 243.5 | 21.3 | 20.7 | 20.2 | 16.2 | -1.12 | 3.64 | 1.01 |
| 77 | 8 | 5 | 15 | 7.4 | 280.1 | 8.3 | 273.0 | 9.2 | 274.4 | 21.7 | 21.4 | 20.8 | 15.5 | -0.87 | 3.64 | 0.74 |
| 77 | 8 | 5 | 16 | 8.0 | 293.5 | 8.8 | 285.0 | 9.5 | 269.7 | 22.4 | 22.2 | 21.6 | 15.3 | -0.80 | 3.64 | 0.62 |
| 77 | 8 | 5 | 17 | 4.8 | 363.8 | 5.2 | 358.5 | 5.7 | 365.5 | 22.8 | 23.0 | 22.1 | 14.8 | -0.66 | 3.64 | 0.39 |
| 77 | 8 | 5 | 18 | 8.1 | 348.3 | 9.2 | 340.9 | 9.8 | 348.3 | 22.1 | 22.2 | 21.6 | 15.6 | -0.52 | 3.64 | 0.13 |
| 77 | 8 | 5 | 19 | 11.6 | 290.4 | 13.2 | 294.2 | 15.3 | 314.1 | 16.4 | 16.7 | 16.9 | 25.1 | 0.53 | 3.67 | 0.03 |
| 77 | 8 | 5 | 20 | 5.8 | 227.2 | 4.9 | 200.2 | 3.7 | 219.2 | 17.1 | 17.6 | 18.1 | 20.3 | 0.95 | 3.68 | 0.00 |
| 77 | 8 | 5 | 21 | 4.1 | 215.0 | 4.2 | 191.3 | 4.9 | 184.3 | 16.7 | 17.4 | 17.5 | 19.6 | 0.77 | 3.68 | 0.00 |
| 77 | 8 | 5 | 22 | 6.5 | 326.0 | 7.2 | 329.0 | 7.6 | 338.0 | 15.0 | 15.5 | 16.1 | 34.8 | 1.04 | 3.96 | 0.01 |
| 77 | 8 | 5 | 23 | 6.2 | 439.4 | 7.9 | 421.4 | 9.7 | 67.1 | 13.0 | 13.3 | 13.5 | 53.6 | 0.47 | 4.16 | 0.01 |
| 77 | 8 | 5 | 24 | 5.6 | 312.2 | 6.2 | 388.9 | 7.5 | 56.9 | 12.5 | 12.4 | 12.8 | 53.3 | 0.26 | 4.20 | 0.01 |
| 77 | 8 | 6 | 1 | 8.1 | 36.0 | 10.4 | 23.2 | 12.9 | 31.4 | 11.5 | 11.8 | 11.5 | 53.4 | 0.00 | 4.20 | 0.01 |
| 77 | 8 | 6 | 2 | 2.6 | 306.8 | 2.9 | 332.0 | 4.1 | 377.3 | 11.3 | 11.2 | 11.2 | 53.9 | -0.12 | 4.20 | 0.01 |
| 77 | 8 | 6 | 3 | 4.4 | 294.1 | 4.0 | 307.5 | 3.8 | 339.5 | 11.4 | 11.5 | 11.4 | 53.8 | -0.02 | 4.20 | 0.00 |
| 77 | 8 | 6 | 4 | 4.1 | 296.8 | 3.6 | 308.2 | 3.1 | 346.3 | 12.0 | 12.1 | 12.1 | 51.5 | 0.05 | 4.20 | 0.00 |
| 77 | 8 | 6 | 5 | 5.5 | 266.4 | 4.5 | 260.2 | 3.6 | 256.6 | 12.1 | 12.4 | 12.2 | 51.1 | 0.08 | 4.20 | 0.01 |
| 77 | 8 | 6 | 6 | 3.9 | 242.8 | 3.4 | 230.1 | 2.8 | 205.6 | 12.7 | 13.0 | 12.8 | 47.8 | 0.13 | 4.20 | 0.08 |
| 77 | 8 | 6 | 7 | 2.3 | 202.7 | 2.2 | 117.1 | 2.4 | 183.6 | 13.5 | 14.5 | 13.3 | 42.1 | -0.18 | 4.20 | 0.29 |
| 77 | 8 | 6 | 8 | 4.4 | 176.6 | 4.9 | 176.6 | 5.2 | 193.2 | 14.8 | 15.1 | 14.4 | 35.0 | -0.41 | 4.20 | 0.58 |
| 77 | 8 | 6 | 9 | 4.9 | 170.1 | 5.6 | 165.0 | 5.8 | 172.8 | 17.1 | 17.3 | 16.5 | 24.0 | -0.60 | 4.20 | 0.90 |
| 77 | 8 | 6 | 10 | 5.3 | 130.4 | 5.7 | 129.2 | 5.9 | 144.0 | 19.1 | 19.2 | 18.4 | 16.6 | -0.65 | 4.20 | 1.12 |
| 77 | 8 | 6 | 11 | 8.1 | 315.6 | 9.5 | 209.9 | 11.1 | 218.8 | 21.7 | 21.6 | 21.0 | 15.4 | -0.74 | 4.20 | 1.24 |
| 77 | 8 | 6 | 12 | 12.9 | 269.3 | 14.4 | 259.8 | 15.5 | 262.9 | 23.8 | 23.1 | 22.8 | 14.7 | -1.00 | 4.20 | 1.42 |
| 77 | 8 | 6 | 13 | 13.9 | 288.4 | 15.7 | 279.9 | 16.4 | 284.2 | 24.3 | 23.5 | 23.2 | 14.6 | -1.07 | 4.20 | 1.18 |
| 77 | 8 | 6 | 14 | 9.5 | 295.9 | 10.7 | 284.2 | 11.6 | 287.3 | 24.5 | 24.0 | 23.6 | 14.3 | -0.90 | 4.20 | 1.07 |
| 77 | 8 | 6 | 15 | 8.5 | 295.3 | 9.1 | 286.9 | 10.0 | 291.7 | 24.5 | 24.3 | 23.7 | 14.3 | -0.78 | 4.20 | 0.69 |
| 77 | 8 | 6 | 16 | 6.7 | 285.3 | 7.5 | 275.3 | 8.2 | 281.0 | 24.9 | 24.8 | 24.2 | 14.1 | -0.71 | 4.20 | 0.50 |
| 77 | 8 | 6 | 17 | 6.5 | 293.2 | 7.0 | 284.6 | 7.2 | 288.1 | 24.7 | 24.7 | 24.2 | 14.3 | -0.54 | 4.20 | 0.32 |
| 77 | 8 | 6 | 18 | 8.1 | 311.8 | 9.3 | 307.1 | 10.4 | 317.9 | 23.3 | 23.3 | 23.0 | 15.1 | -0.22 | 4.20 | 0.15 |
| 77 | 8 | 6 | 19 | 5.4 | 279.8 | 5.7 | 284.5 | 5.6 | 299.9 | 22.3 | 22.8 | 22.9 | 15.5 | 0.52 | 4.20 | 0.04 |
| 77 | 8 | 6 | 20 | 3.5 | 254.3 | 3.1 | 197.3 | 3.4 | 186.4 | 22.0 | 22.2 | 23.2 | 15.8 | 1.25 | 4.20 | 0.01 |
| 77 | 8 | 6 | 21 | 3.2 | 199.4 | 3.6 | 181.8 | 3.7 | 166.9 | 22.2 | 22.2 | 22.6 | 15.8 | 0.35 | 4.20 | 0.01 |
| 77 | 8 | 6 | 22 | 4.6 | 44.8 | 5.6 | 388.7 | 7.5 | 388.0 | 17.8 | 17.9 | 17.8 | 17.5 | -0.08 | 4.20 | 0.00 |
| 77 | 8 | 6 | 23 | 2.4 | 244.5 | 2.4 | 256.4 | 3.5 | 16.8 | 17.2 | 16.6 | 17.2 | 18.3 | 0.04 | 4.20 | 0.00 |
| 77 | 8 | 6 | 24 | 4.9 | 303.9 | 4.8 | 313.6 | 4.9 | 345.8 | 17.0 | 17.0 | 17.1 | 18.2 | 0.08 | 4.20 | 0.00 |
| 77 | 8 | 7 | 1 | 5.9 | 298.0 | 5.1 | 305.3 | 4.2 | 325.4 | 17.3 | 17.5 | 17.6 | 17.9 | 0.33 | 4.20 | 0.00 |
| 77 | 8 | 7 | 2 | 5.1 | 260.7 | 5.5 | 265.6 | 6.0 | 260.2 | 18.7 | 19.1 | 19.4 | 17.3 | 0.66 | 4.20 | 0.00 |
| 77 | 8 | 7 | 3 | 11.2 | 257.8 | 14.3 | 253.0 | 16.1 | 261.0 | 20.3 | 21.3 | 21.2 | 16.2 | 0.88 | 4.20 | 0.00 |
| 77 | 8 | 7 | 4 | 12.4 | 258.3 | 15.5 | 253.9 | 17.0 | 262.6 | 19.2 | 20.5 | 20.4 | 16.7 | 1.14 | 4.20 | 0.00 |
| 77 | 8 | 7 | 5 | 12.3 | 258.2 | 14.2 | 249.6 | 15.6 | 254.3 | 19.5 | 20.7 | 20.6 | 16.6 | 1.17 | 4.20 | 0.01 |
| 77 | 8 | 7 | 6 | 11.3 | 256.4 | 12.8 | 246.1 | 13.9 | 248.6 | 19.8 | 20.7 | 20.6 | 16.4 | 0.84 | 4.20 | 0.06 |
| 77 | 8 | 7 | 7 | 9.1 | 256.9 | 10.9 | 246.0 | 12.5 | 251.5 | 20.9 | 21.3 | 21.1 | 15.9 | 0.23 | 4.20 | 0.33 |
| 77 | 8 | 7 | 8 | 9.8 | 265.9 | 10.9 | 256.1 | 12.1 | 261.8 | 22.4 | 22.2 | 21.7 | 15.3 | -0.69 | 4.20 | 0.64 |
| 77 | 8 | 7 | 9 | 11.4 | 262.3 | 12.5 | 251.1 | 13.8 | 255.3 | 23.3 | 22.9 | 22.5 | 15.0 | -0.86 | 4.20 | 0.92 |
| 77 | 8 | 7 | 10 | 10.8 | 276.2 | 11.8 | 266.1 | 12.3 | 270.3 | 24.0 | 23.4 | 23.1 | 14.6 | -0.91 | 4.20 | 1.14 |
| 77 | 8 | 7 | 11 | 9.0 | 244.6 | 10.1 | 235.0 | 11.5 | 243.0 | 25.3 | 24.8 | 24.3 | 13.9 | -1.02 | 4.20 | 1.29 |
| 77 | 8 | 7 | 12 | 14.6 | 212.9 | 17.9 | 206.3 | 20.9 | 219.9 | 26.5 | 25.5 | 25.3 | 13.7 | -1.23 | 4.20 | 1.36 |

RIO BLANCO OIL SHALF PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL. HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 7 | 13 | 14.0 | 210.9 | 17.5 | 205.0 | 20.1 | 218.7 | 27.0 | 26.0 | 25.8 | 13.5 | -1.26 | 4.20 | 1.33 |
| 77 | 8 | 7 | 14 | 14.5 | 220.2 | 17.7 | 213.8 | 20.7 | 225.6 | 27.4 | 26.4 | 26.2 | 13.5 | -1.22 | 4.20 | 1.26 |
| 77 | 8 | 7 | 15 | 13.2 | 214.8 | 16.5 | 206.8 | 19.1 | 221.5 | 27.7 | 26.9 | 26.5 | 13.4 | -1.12 | 4.20 | 1.03 |
| 77 | 8 | 7 | 16 | 11.7 | 226.6 | 14.1 | 219.6 | 16.3 | 230.9 | 27.5 | 27.0 | 26.5 | 13.4 | -0.96 | 4.20 | 0.76 |
| 77 | 8 | 7 | 17 | 11.0 | 209.8 | 14.0 | 206.0 | 16.4 | 217.9 | 26.6 | 26.4 | 25.9 | 13.8 | -0.69 | 4.20 | 0.46 |
| 77 | 8 | 7 | 18 | 7.7 | 207.0 | 10.4 | 200.6 | 12.2 | 211.5 | 25.7 | 25.7 | 25.4 | 14.2 | -0.28 | 4.20 | 0.15 |
| 77 | 8 | 7 | 19 | 4.8 | 235.8 | 6.4 | 220.3 | 11.9 | 225.2 | 24.2 | 24.3 | 24.4 | 14.7 | 0.20 | 4.20 | 0.04 |
| 77 | 8 | 7 | 20 | 5.2 | 238.2 | 8.2 | 219.3 | 15.7 | 221.3 | 22.9 | 23.2 | 23.5 | 15.4 | 0.60 | 4.20 | 0.01 |
| 77 | 8 | 7 | 21 | 6.2 | 232.3 | 9.8 | 216.9 | 17.3 | 218.9 | 22.3 | 22.7 | 23.0 | 15.5 | 0.68 | 4.20 | 0.01 |
| 77 | 8 | 7 | 22 | 5.7 | 234.0 | 8.6 | 222.1 | 16.6 | 221.4 | 22.1 | 22.3 | 22.6 | 15.6 | 0.56 | 4.20 | 0.00 |
| 77 | 8 | 7 | 23 | 5.4 | 240.8 | 7.5 | 227.7 | 14.6 | 224.6 | 22.0 | 22.2 | 22.4 | 15.6 | 0.38 | 4.20 | 0.00 |
| 77 | 8 | 7 | 24 | 8.3 | 247.4 | 10.6 | 233.9 | 15.4 | 238.0 | 21.8 | 22.2 | 22.2 | 15.6 | 0.40 | 4.20 | 0.00 |
| 77 | 8 | 8 | 1 | 6.4 | 233.0 | 8.9 | 219.4 | 15.3 | 222.8 | 21.0 | 21.3 | 21.4 | 16.0 | 0.43 | 4.20 | 0.00 |
| 77 | 8 | 8 | 2 | 7.3 | 235.0 | 8.8 | 225.9 | 14.9 | 230.3 | 20.5 | 20.7 | 20.6 | 16.2 | 0.07 | 4.20 | 0.00 |
| 77 | 8 | 8 | 3 | 5.9 | 232.9 | 7.8 | 223.2 | 14.0 | 227.8 | 19.8 | 20.0 | 20.0 | 16.6 | 0.21 | 4.20 | 0.00 |
| 77 | 8 | 8 | 4 | 6.1 | 258.7 | 7.4 | 234.6 | 12.6 | 226.3 | 19.4 | 19.5 | 19.5 | 16.8 | 0.11 | 4.20 | 0.00 |
| 77 | 8 | 8 | 5 | 8.8 | 275.0 | 9.4 | 251.4 | 11.5 | 233.9 | 19.0 | 19.2 | 19.0 | 17.0 | -0.04 | 4.20 | 0.01 |
| 77 | 8 | 8 | 6 | 9.7 | 263.1 | 11.0 | 242.6 | 15.6 | 241.9 | 19.0 | 19.3 | 18.9 | 17.0 | -0.07 | 4.20 | 0.09 |
| 77 | 8 | 8 | 7 | 8.2 | 259.1 | 8.7 | 239.8 | 10.0 | 240.9 | 20.4 | 20.4 | 19.8 | 16.2 | -0.56 | 4.20 | 0.35 |
| 77 | 8 | 8 | 8 | 8.7 | 251.5 | 9.8 | 240.5 | 10.7 | 241.8 | 21.6 | 21.4 | 20.8 | 15.7 | -0.74 | 4.20 | 0.60 |
| 77 | 8 | 8 | 9 | 9.9 | 268.6 | 11.1 | 257.6 | 12.3 | 261.5 | 20.9 | 20.9 | 20.3 | 16.0 | -0.57 | 4.20 | 0.40 |
| 77 | 8 | 8 | 10 | 10.9 | 250.6 | 12.6 | 238.7 | 14.0 | 246.2 | 23.1 | 22.6 | 22.1 | 15.0 | -1.01 | 4.20 | 1.06 |
| 77 | 8 | 8 | 11 | 11.3 | 264.1 | 12.7 | 253.6 | 14.1 | 257.0 | 23.8 | 23.2 | 22.8 | 14.6 | -1.07 | 4.20 | 1.14 |
| 77 | 8 | 8 | 12 | 11.2 | 265.2 | 12.7 | 255.4 | 14.4 | 260.9 | 22.8 | 22.5 | 22.1 | 15.1 | -0.79 | 4.20 | 0.64 |
| 77 | 8 | 8 | 13 | 11.5 | 228.9 | 14.3 | 221.2 | 16.4 | 233.0 | 24.0 | 23.4 | 23.0 | 14.8 | -0.93 | 4.20 | 1.02 |
| 77 | 8 | 8 | 14 | 14.7 | 204.8 | 18.4 | 200.8 | 21.4 | 215.7 | 25.4 | 24.5 | 24.2 | 14.3 | -1.19 | 4.20 | 1.17 |
| 77 | 8 | 8 | 15 | 11.3 | 212.0 | 14.0 | 206.8 | 16.0 | 217.7 | 25.9 | 25.3 | 24.9 | 14.0 | -1.00 | 4.20 | 0.87 |
| 77 | 8 | 8 | 16 | 13.4 | 271.0 | 15.2 | 262.6 | 17.0 | 270.1 | 27.0 | 26.3 | 26.0 | 13.5 | -0.97 | 4.20 | 0.91 |
| 77 | 8 | 8 | 17 | 13.9 | 273.2 | 16.2 | 266.0 | 17.6 | 272.8 | 26.8 | 26.3 | 26.0 | 13.7 | -0.78 | 4.20 | 0.59 |
| 77 | 8 | 8 | 18 | 11.2 | 284.5 | 13.1 | 277.3 | 14.6 | 285.6 | 26.1 | 26.1 | 25.5 | 13.9 | -0.58 | 4.20 | 0.29 |
| 77 | 8 | 8 | 19 | 13.0 | 319.1 | 15.7 | 310.1 | 17.6 | 317.0 | 24.2 | 24.6 | 24.3 | 14.8 | 0.07 | 4.20 | 0.06 |
| 77 | 8 | 8 | 20 | 12.4 | 312.4 | 15.5 | 307.5 | 17.6 | 319.7 | 22.4 | 23.2 | 23.0 | 15.6 | 0.60 | 4.20 | 0.01 |
| 77 | 8 | 8 | 21 | 12.4 | 302.0 | 16.3 | 299.8 | 18.5 | 313.3 | 21.6 | 22.6 | 22.6 | 15.8 | 1.02 | 4.20 | 0.01 |
| 77 | 8 | 8 | 22 | 9.6 | 291.5 | 12.6 | 301.3 | 14.5 | 318.2 | 20.7 | 21.9 | 22.0 | 16.1 | 1.29 | 4.20 | 0.00 |
| 77 | 8 | 8 | 23 | 3.8 | 315.8 | 4.8 | 363.2 | 8.0 | 32.4 | 19.3 | 19.5 | 20.2 | 16.9 | 0.95 | 4.20 | 0.00 |
| 77 | 8 | 8 | 24 | 2.0 | 248.7 | 2.1 | 29.3 | 4.3 | 71.4 | 19.0 | 17.6 | 19.2 | 17.4 | 0.25 | 4.20 | 0.00 |
| 77 | 8 | 9 | 1 | 3.3 | 290.5 | 2.6 | 322.6 | 3.3 | 37.1 | 18.3 | 17.5 | 18.5 | 17.5 | 0.19 | 4.20 | 0.00 |
| 77 | 8 | 9 | 2 | 3.8 | 218.7 | 4.4 | 201.6 | 5.7 | 135.9 | 17.7 | 17.5 | 18.2 | 17.6 | 0.52 | 4.20 | 0.01 |
| 77 | 8 | 9 | 3 | 3.7 | 200.5 | 4.7 | 180.7 | 6.0 | 162.1 | 17.5 | 17.8 | 18.1 | 17.7 | 0.65 | 4.20 | 0.00 |
| 77 | 8 | 9 | 4 | 3.1 | 227.3 | 3.2 | 203.7 | 3.6 | 178.5 | 17.8 | 17.6 | 18.2 | 17.6 | 0.37 | 4.20 | 0.00 |
| 77 | 8 | 9 | 5 | 3.7 | 240.3 | 3.0 | 221.8 | 2.7 | 202.5 | 18.2 | 17.4 | 18.3 | 17.3 | 0.08 | 4.20 | 0.01 |
| 77 | 8 | 9 | 6 | 2.9 | 285.6 | 2.9 | 299.9 | 4.1 | 329.5 | 18.1 | 17.5 | 18.3 | 17.3 | 0.20 | 4.20 | 0.09 |
| 77 | 8 | 9 | 7 | 2.5 | 167.6 | 1.9 | 187.3 | 1.7 | 139.8 | 18.5 | 19.8 | 18.5 | 16.1 | 0.02 | 4.20 | 0.34 |
| 77 | 8 | 9 | 8 | 3.4 | 74.1 | 3.7 | 67.5 | 3.9 | 82.6 | 20.2 | 21.0 | 19.7 | 15.1 | -0.48 | 4.20 | 0.63 |
| 77 | 8 | 9 | 9 | 5.0 | 81.6 | 5.6 | 73.7 | 6.0 | 81.8 | 21.2 | 21.5 | 20.7 | 14.9 | -0.57 | 4.20 | 0.90 |
| 77 | 8 | 9 | 10 | 7.2 | 356.5 | 7.8 | 351.0 | 8.3 | 357.6 | 22.9 | 22.7 | 22.0 | 14.6 | -0.84 | 4.20 | 1.13 |
| 77 | 8 | 9 | 11 | 10.5 | 279.1 | 11.6 | 270.2 | 12.4 | 276.6 | 24.1 | 23.4 | 23.0 | 14.5 | -1.11 | 4.20 | 1.31 |
| 77 | 8 | 9 | 12 | 10.1 | 292.6 | 11.3 | 282.8 | 12.4 | 290.7 | 24.9 | 24.1 | 23.6 | 14.2 | -1.25 | 4.20 | 1.36 |
| 77 | 8 | 9 | 13 | 13.5 | 305.5 | 15.1 | 297.1 | 16.2 | 304.5 | 25.3 | 24.4 | 24.2 | 14.1 | -1.15 | 4.20 | 1.35 |
| 77 | 8 | 9 | 14 | 12.4 | 306.5 | 14.0 | 298.0 | 15.3 | 305.6 | 25.8 | 24.9 | 24.5 | 14.0 | -1.26 | 4.20 | 1.25 |
| 77 | 8 | 9 | 15 | 11.5 | 327.3 | 12.4 | 318.9 | 13.2 | 326.9 | 25.8 | 25.2 | 24.8 | 14.0 | -1.02 | 4.20 | 1.08 |
| 77 | 8 | 9 | 16 | 11.7 | 330.5 | 12.9 | 322.5 | 13.6 | 329.3 | 26.0 | 25.5 | 25.0 | 13.9 | -1.00 | 4.20 | 0.84 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 9 | 17 | 7.9 | 335.7 | 8.7 | 325.0 | 9.3 | 327.9 | 25.9 | 25.7 | 25.1 | 13.7 | -0.78 | 4.20 | 0.56 |
| 77 | 8 | 9 | 18 | 10.1 | 326.0 | 11.5 | 318.5 | 12.2 | 326.3 | 25.4 | 25.3 | 24.8 | 14.2 | -0.58 | 4.20 | 0.28 |
| 77 | 8 | 9 | 19 | 10.7 | 305.6 | 13.5 | 308.3 | 14.7 | 319.5 | 23.3 | 24.6 | 24.5 | 15.1 | 1.20 | 4.20 | 0.06 |
| 77 | 8 | 9 | 20 | 8.4 | 299.8 | 10.0 | 317.8 | 12.0 | 339.4 | 21.0 | 22.6 | 23.5 | 16.1 | 2.41 | 4.20 | 0.01 |
| 77 | 8 | 9 | 21 | 8.7 | 351.1 | 12.0 | 365.1 | 14.5 | 22.5 | 20.4 | 21.9 | 22.1 | 16.2 | 1.76 | 4.20 | 0.01 |
| 77 | 8 | 9 | 22 | 4.4 | 323.4 | 5.3 | 356.5 | 7.8 | 38.7 | 20.4 | 20.5 | 21.2 | 16.4 | 0.76 | 4.20 | 0.00 |
| 77 | 8 | 9 | 23 | 2.0 | 242.5 | 1.6 | 242.9 | 2.3 | 85.0 | 20.9 | 18.6 | 21.0 | 16.7 | 0.12 | 4.20 | 0.00 |
| 77 | 8 | 9 | 24 | 2.6 | 246.1 | 2.4 | 227.0 | 2.5 | 150.7 | 20.8 | 19.4 | 21.1 | 16.7 | 0.30 | 4.20 | 0.00 |
| 77 | 8 | 10 | 1 | 4.6 | 257.3 | 4.1 | 252.6 | 3.2 | 245.0 | 20.5 | 20.4 | 20.9 | 16.4 | 0.36 | 4.20 | 0.00 |
| 77 | 8 | 10 | 2 | 4.3 | 301.4 | 4.2 | 317.8 | 3.9 | 356.5 | 20.3 | 20.3 | 20.8 | 16.5 | 0.43 | 4.20 | 0.00 |
| 77 | 8 | 10 | 3 | 4.2 | 317.4 | 4.1 | 331.0 | 4.9 | 368.0 | 19.0 | 19.0 | 19.4 | 17.0 | 0.43 | 4.20 | 0.00 |
| 77 | 8 | 10 | 4 | 4.0 | 293.2 | 3.9 | 299.8 | 4.3 | 335.0 | 18.0 | 17.8 | 18.1 | 17.4 | 0.10 | 4.20 | 0.00 |
| 77 | 8 | 10 | 5 | 2.2 | 338.8 | 2.9 | 350.6 | 4.3 | 17.9 | 17.4 | 16.8 | 17.6 | 18.0 | 0.13 | 4.20 | 0.01 |
| 77 | 8 | 10 | 6 | 4.8 | 304.8 | 4.7 | 321.8 | 4.7 | 351.5 | 16.8 | 17.2 | 17.3 | 17.6 | 0.53 | 4.20 | 0.09 |
| 77 | 8 | 10 | 7 | 2.6 | 384.2 | 2.7 | 389.2 | 3.1 | 41.8 | 18.0 | 18.9 | 17.7 | 16.4 | -0.30 | 4.20 | 0.35 |
| 77 | 8 | 10 | 8 | 4.5 | 75.2 | 4.7 | 69.0 | 5.0 | 79.7 | 18.8 | 19.3 | 18.3 | 15.9 | -0.47 | 4.20 | 0.62 |
| 77 | 8 | 10 | 9 | 5.3 | 107.6 | 5.6 | 101.6 | 6.2 | 110.4 | 19.6 | 19.7 | 19.0 | 15.6 | -0.63 | 4.20 | 0.89 |
| 77 | 8 | 10 | 10 | 5.6 | 109.3 | 6.7 | 102.5 | 7.1 | 112.9 | 21.2 | 21.1 | 20.5 | 14.8 | -0.72 | 4.20 | 1.11 |
| 77 | 8 | 10 | 11 | 6.2 | 69.9 | 6.7 | 63.8 | 6.9 | 78.7 | 22.8 | 22.7 | 22.1 | 14.3 | -0.70 | 4.20 | 1.28 |
| 77 | 8 | 10 | 12 | 5.9 | 90.4 | 6.4 | 79.8 | 6.7 | 83.8 | 24.0 | 23.9 | 23.3 | 13.5 | -0.67 | 4.20 | 1.1[illegible] |
| 77 | 8 | 10 | 13 | 6.9 | 171.0 | 7.5 | 165.6 | 7.7 | 172.2 | 24.9 | 24.9 | 24.2 | 13.5 | -0.73 | 4.20 | 0.88 |
| 77 | 8 | 10 | 14 | 8.9 | 311.6 | 9.8 | 304.8 | 10.7 | 312.4 | 25.8 | 25.3 | 24.8 | 13.7 | -1.05 | 4.20 | 1.19 |
| 77 | 8 | 10 | 15 | 11.5 | 308.5 | 13.1 | 300.6 | 13.7 | 307.1 | 25.4 | 25.0 | 24.5 | 14.3 | -0.91 | 4.20 | 0.57 |
| 77 | 8 | 10 | 16 | 9.2 | 302.4 | 10.2 | 294.3 | 10.9 | 298.1 | 25.6 | 25.2 | 24.7 | 14.0 | -0.86 | 4.20 | 0.54 |
| 77 | 8 | 10 | 17 | 9.7 | 283.5 | 11.0 | 276.8 | 12.3 | 283.1 | 25.3 | 25.1 | 24.6 | 14.3 | -0.71 | 4.20 | 0.33 |
| 77 | 8 | 10 | 18 | 9.2 | 303.8 | 10.9 | 296.0 | 12.2 | 302.7 | 24.8 | 24.7 | 24.3 | 14.6 | -0.45 | 4.20 | 0.17 |
| 77 | 8 | 10 | 19 | 6.7 | 303.1 | 8.0 | 306.6 | 9.1 | 317.4 | 23.4 | 23.8 | 23.7 | 15.2 | 0.33 | 4.20 | 0.03 |
| 77 | 8 | 10 | 20 | 9.0 | 275.9 | 10.5 | 275.2 | 11.3 | 288.0 | 23.0 | 23.5 | 23.4 | 15.3 | 0.44 | 4.20 | 0.01 |
| 77 | 8 | 10 | 21 | 7.7 | 318.1 | 9.7 | 319.0 | 10.3 | 332.6 | 21.4 | 22.0 | 21.9 | 15.8 | 0.54 | 4.20 | 0.01 |
| 77 | 8 | 10 | 22 | 6.4 | 292.5 | 7.3 | 94.6 | 7.7 | 99.6 | 19.4 | 19.3 | 19.3 | 16.6 | -0.10 | 4.20 | 0.01 |
| 77 | 8 | 10 | 23 | 2.7 | 287.6 | 2.7 | 343.0 | 3.3 | 65.4 | 18.3 | 17.9 | 18.7 | 17.4 | 0.38 | 4.20 | 0.01 |
| 77 | 8 | 10 | 24 | 6.6 | 304.0 | 6.9 | 311.8 | 7.2 | 344.8 | 17.4 | 17.8 | 17.8 | 17.5 | 0.42 | 4.20 | 0.01 |
| 77 | 8 | 11 | 1 | 3.5 | 304.9 | 3.5 | 330.1 | 3.6 | 370.7 | 17.5 | 17.6 | 17.8 | 17.5 | 0.31 | 4.20 | 0.01 |
| 77 | 8 | 11 | 2 | 3.6 | 226.0 | 3.5 | 162.2 | 3.6 | 141.4 | 16.3 | 16.1 | 16.7 | 18.2 | 0.39 | 4.20 | 0.01 |
| 77 | 8 | 11 | 3 | 4.3 | 234.2 | 4.5 | 208.4 | 4.6 | 205.5 | 16.2 | 16.5 | 16.7 | 18.1 | 0.49 | 4.20 | 0.01 |
| 77 | 8 | 11 | 4 | 2.1 | 360.0 | 2.8 | 47.3 | 3.4 | 93.3 | 15.4 | 14.9 | 15.8 | 18.8 | 0.44 | 4.20 | 0.01 |
| 77 | 8 | 11 | 5 | 4.0 | 303.8 | 3.6 | 333.5 | 3.1 | 380.5 | 14.4 | 14.2 | 14.7 | 19.1 | 0.32 | 4.20 | 0.01 |
| 77 | 8 | 11 | 6 | 3.5 | 280.8 | 3.6 | 343.4 | 4.2 | 389.6 | 13.7 | 14.1 | 14.0 | 19.3 | 0.30 | 4.20 | 0.11 |
| 77 | 8 | 11 | 7 | 6.0 | 57.4 | 6.3 | 408.9 | 6.5 | 415.7 | 14.8 | 14.9 | 14.3 | 18.5 | -0.45 | 4.20 | 0.27 |
| 77 | 8 | 11 | 8 | 8.8 | 246.7 | 10.4 | 245.1 | 12.2 | 263.9 | 16.2 | 16.3 | 15.9 | 17.8 | -0.28 | 4.20 | 0.21 |
| 77 | 8 | 11 | 9 | 7.7 | 47.1 | 9.1 | 46.6 | 10.4 | 68.1 | 17.7 | 17.7 | 17.5 | 17.4 | -0.19 | 4.20 | 0.34 |
| 77 | 8 | 11 | 10 | 5.3 | 194.8 | 6.0 | 183.6 | 6.2 | 192.1 | 20.0 | 20.0 | 19.3 | 15.9 | -0.67 | 4.20 | 0.83 |
| 77 | 8 | 11 | 11 | 8.4 | 340.5 | 9.3 | 330.4 | 9.7 | 337.1 | 23.0 | 22.6 | 22.0 | 14.8 | -1.02 | 4.20 | 1.28 |
| 77 | 8 | 11 | 12 | 7.0 | 405.2 | 7.4 | 393.4 | 7.6 | 402.3 | 23.5 | 23.3 | 22.7 | 14.3 | -0.79 | 4.20 | 0.93 |
| 77 | 8 | 11 | 13 | 6.0 | 343.1 | 6.3 | 336.1 | 6.5 | 340.0 | 24.8 | 24.7 | 23.9 | 13.6 | -0.91 | 4.20 | 1.25 |
| 77 | 8 | 11 | 14 | 11.6 | 318.2 | 12.8 | 310.5 | 13.7 | 316.7 | 25.4 | 24.8 | 24.3 | 14.0 | -1.11 | 4.20 | 1.03 |
| 77 | 8 | 11 | 15 | 11.4 | 343.9 | 12.5 | 336.1 | 13.3 | 341.9 | 24.7 | 24.5 | 24.0 | 14.6 | -0.71 | 4.20 | 0.41 |
| 77 | 8 | 11 | 16 | 13.2 | 292.6 | 15.2 | 282.2 | 16.8 | 287.7 | 23.2 | 23.0 | 22.6 | 15.2 | -0.61 | 4.20 | 0.15 |
| 77 | 8 | 11 | 17 | 10.1 | 220.2 | 12.1 | 209.3 | 13.7 | 216.9 | 21.4 | 21.2 | 20.7 | 15.6 | -0.74 | 4.20 | 0.41 |
| 77 | 8 | 11 | 18 | 7.2 | 199.9 | 8.5 | 191.4 | 8.6 | 199.6 | 21.4 | 21.4 | 20.9 | 15.5 | -0.47 | 4.20 | 0.24 |
| 77 | 8 | 11 | 19 | 6.7 | 231.8 | 7.6 | 216.1 | 7.8 | 216.1 | 20.7 | 21.0 | 20.8 | 16.0 | 0.07 | 4.20 | 0.05 |
| 77 | 8 | 11 | 20 | 7.6 | 245.3 | 6.8 | 227.3 | 6.3 | 226.9 | 20.9 | 21.1 | 21.0 | 16.1 | 0.09 | 4.20 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 11 | 21 | 5.7 | 239.3 | 4.8 | 217.8 | 4.5 | 215.9 | 21.2 | 21.2 | 21.2 | 16.0 | -0.01 | 4.20 | 0.01 |
| 77 | 8 | 11 | 22 | 3.5 | 267.1 | 3.0 | 267.4 | 2.4 | 281.6 | 21.3 | 20.7 | 21.4 | 16.1 | 0.06 | 4.20 | 0.01 |
| 77 | 8 | 11 | 23 | 5.0 | 300.0 | 4.7 | 306.3 | 4.2 | 330.5 | 20.7 | 20.4 | 21.1 | 16.4 | 0.42 | 4.20 | 0.00 |
| 77 | 8 | 11 | 24 | 7.0 | 281.8 | 6.8 | 288.0 | 6.5 | 311.4 | 20.4 | 20.7 | 20.8 | 16.3 | 0.41 | 4.20 | 0.00 |
| 77 | 8 | 12 | 1 | 8.7 | 271.8 | 8.6 | 276.3 | 7.7 | 289.6 | 20.1 | 20.7 | 20.8 | 16.4 | 0.77 | 4.20 | 0.00 |
| 77 | 8 | 12 | 2 | 6.7 | 278.3 | 8.3 | 280.1 | 10.2 | 299.6 | 19.0 | 19.8 | 20.1 | 16.8 | 1.14 | 4.20 | 0.00 |
| 77 | 8 | 12 | 3 | 3.6 | 186.7 | 4.4 | 207.6 | 4.7 | 286.3 | 17.6 | 18.2 | 18.8 | 17.5 | 1.16 | 4.20 | 0.00 |
| 77 | 8 | 12 | 4 | 4.8 | 250.4 | 5.9 | 228.2 | 6.4 | 237.2 | 17.3 | 17.8 | 17.9 | 17.5 | 0.61 | 4.20 | 0.00 |
| 77 | 8 | 12 | 5 | 11.9 | 260.5 | 14.0 | 250.0 | 15.7 | 247.8 | 16.0 | 16.5 | 16.5 | 18.1 | 0.47 | 4.20 | 0.01 |
| 77 | 8 | 12 | 6 | 9.5 | 248.1 | 11.4 | 232.7 | 15.5 | 234.1 | 16.0 | 16.4 | 16.3 | 18.3 | 0.25 | 4.20 | 0.09 |
| 77 | 8 | 12 | 7 | 6.9 | 214.9 | 7.9 | 211.3 | 9.2 | 225.8 | 17.7 | 17.8 | 17.2 | 17.4 | -0.55 | 4.20 | 0.32 |
| 77 | 8 | 12 | 8 | 10.3 | 268.3 | 11.4 | 258.5 | 12.2 | 262.1 | 19.4 | 19.2 | 18.6 | 16.5 | -0.85 | 4.20 | 0.62 |
| 77 | 8 | 12 | 9 | 10.5 | 265.6 | 11.4 | 255.4 | 12.2 | 259.1 | 20.2 | 19.8 | 19.3 | 16.3 | -0.96 | 4.20 | 0.89 |
| 77 | 8 | 12 | 9 | 8.2 | 266.0 | 9.1 | 255.4 | 9.3 | 253.8 | 21.4 | 21.0 | 20.6 | 15.7 | -0.82 | 1.05 | 1.03 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 12 | 10 | 8.2 | 272.9 | 8.8 | 263.4 | 9.4 | 256.3 | 22.4 | 22.0 | 21.5 | 15.1 | -0.91 | 2.10 | 1.15 |
| 77 | 8 | 12 | 11 | 10.9 | 277.0 | 11.9 | 267.4 | 12.8 | 271.8 | 23.4 | 22.7 | 22.3 | 14.8 | -1.09 | 4.20 | 1.26 |
| 77 | 8 | 12 | 12 | 11.1 | 263.0 | 12.3 | 252.1 | 13.4 | 256.4 | 24.4 | 23.7 | 23.3 | 14.3 | -1.11 | 4.20 | 1.36 |
| 77 | 8 | 12 | 13 | 11.6 | 276.3 | 12.7 | 268.3 | 13.6 | 277.1 | 24.9 | 24.2 | 23.9 | 14.2 | -0.98 | 4.20 | 1.12 |
| 77 | 8 | 12 | 14 | 10.1 | 320.9 | 10.9 | 309.8 | 11.8 | 313.1 | 25.1 | 24.7 | 24.2 | 14.2 | -0.93 | 4.20 | 0.85 |
| 77 | 8 | 12 | 15 | 12.6 | 334.1 | 14.0 | 324.5 | 14.9 | 330.1 | 25.6 | 25.1 | 24.6 | 14.1 | -0.94 | 4.20 | 0.72 |
| 77 | 8 | 12 | 16 | 10.7 | 312.0 | 12.1 | 303.0 | 13.1 | 310.6 | 25.2 | 24.9 | 24.4 | 14.3 | -0.82 | 4.20 | 0.43 |
| 77 | 8 | 12 | 17 | 11.7 | 288.8 | 13.1 | 278.3 | 15.0 | 284.7 | 24.4 | 24.2 | 23.7 | 14.6 | -0.70 | 4.20 | 0.33 |
| 77 | 8 | 12 | 18 | 14.5 | 265.8 | 17.3 | 257.0 | 19.8 | 265.5 | 22.8 | 22.7 | 22.3 | 15.4 | -0.51 | 4.20 | 0.15 |
| 77 | 8 | 12 | 19 | 13.7 | 280.3 | 17.0 | 273.2 | 19.6 | 284.7 | 21.0 | 21.1 | 20.9 | 16.0 | -0.12 | 4.20 | 0.03 |
| 77 | 8 | 12 | 20 | 12.4 | 259.8 | 15.3 | 257.3 | 16.7 | 268.5 | 20.4 | 21.1 | 21.4 | 16.2 | 0.94 | 4.20 | 0.01 |
| 77 | 8 | 12 | 21 | 13.0 | 257.3 | 16.7 | 252.5 | 19.5 | 262.5 | 19.5 | 20.2 | 20.2 | 16.5 | 0.63 | 4.20 | 0.01 |
| 77 | 8 | 12 | 22 | 15.3 | 266.5 | 18.8 | 260.7 | 22.2 | 270.9 | 19.5 | 19.9 | 19.5 | 16.5 | 0.04 | 4.20 | 0.00 |
| 77 | 8 | 12 | 23 | 15.2 | 268.9 | 18.9 | 263.5 | 22.7 | 274.9 | 19.4 | 19.8 | 19.5 | 16.5 | 0.08 | 4.20 | 0.00 |
| 77 | 8 | 12 | 24 | 9.3 | 307.8 | 12.0 | 283.1 | 15.8 | 277.7 | 18.7 | 19.0 | 18.9 | 16.8 | 0.15 | 4.20 | 0.00 |
| 77 | 8 | 13 | 1 | 3.3 | 107.0 | 4.2 | 92.1 | 5.0 | 150.6 | 17.6 | 17.6 | 17.8 | 17.7 | 0.20 | 4.20 | 0.00 |
| 77 | 8 | 13 | 2 | 2.7 | 435.9 | 3.0 | 440.2 | 3.1 | 423.3 | 17.4 | 17.0 | 17.6 | 18.0 | 0.25 | 4.20 | 0.01 |
| 77 | 8 | 13 | 3 | 5.3 | 264.3 | 6.3 | 256.4 | 7.6 | 261.4 | 17.3 | 17.2 | 17.3 | 17.7 | 0.03 | 4.20 | 0.00 |
| 77 | 8 | 13 | 4 | 4.7 | 263.8 | 5.6 | 266.7 | 6.7 | 275.9 | 16.7 | 16.8 | 16.8 | 17.8 | 0.13 | 4.20 | 0.00 |
| 77 | 8 | 13 | 5 | 3.1 | 140.1 | 3.6 | 133.4 | 4.0 | 135.4 | 16.4 | 15.9 | 16.7 | 18.5 | 0.31 | 4.20 | 0.01 |
| 77 | 8 | 13 | 6 | 3.9 | 237.9 | 4.9 | 199.1 | 6.1 | 198.3 | 16.5 | 17.2 | 17.4 | 17.8 | 0.93 | 4.20 | 0.09 |
| 77 | 8 | 13 | 7 | 2.4 | 367.8 | 2.3 | 108.8 | 3.0 | 129.2 | 18.6 | 19.6 | 18.4 | 16.3 | -0.20 | 4.20 | 0.32 |
| 77 | 8 | 13 | 8 | 3.7 | 63.4 | 3.7 | 54.1 | 3.7 | 67.1 | 19.8 | 20.7 | 19.4 | 15.4 | -0.42 | 4.20 | 0.61 |
| 77 | 8 | 13 | 9 | 4.2 | 382.1 | 4.4 | 376.4 | 4.7 | 399.9 | 21.6 | 22.3 | 21.0 | 14.7 | -0.63 | 4.20 | 0.88 |
| 77 | 8 | 13 | 10 | 5.2 | 28.5 | 5.3 | 20.2 | 5.4 | 33.0 | 22.9 | 23.2 | 22.2 | 14.3 | -0.71 | 4.20 | 1.09 |
| 77 | 8 | 13 | 11 | 6.1 | 66.5 | 6.4 | 54.9 | 6.6 | 54.8 | 23.6 | 23.7 | 22.9 | 13.7 | -0.73 | 4.20 | 0.95 |
| 77 | 8 | 13 | 12 | 6.5 | 276.6 | 6.9 | 268.1 | 7.2 | 278.5 | 23.9 | 23.8 | 23.2 | 14.3 | -0.73 | 4.20 | 0.71 |
| 77 | 8 | 13 | 13 | 7.9 | 232.2 | 8.8 | 224.4 | 9.4 | 231.5 | 24.6 | 24.3 | 23.6 | 14.1 | -0.97 | 4.20 | 0.77 |
| 77 | 8 | 13 | 14 | 11.6 | 302.7 | 13.4 | 292.6 | 14.9 | 297.7 | 23.5 | 23.2 | 22.7 | 14.9 | -0.66 | 4.20 | 0.39 |
| 77 | 8 | 13 | 15 | 8.8 | 348.3 | 10.1 | 341.9 | 10.7 | 347.3 | 22.6 | 22.4 | 21.9 | 15.3 | -0.73 | 4.20 | 0.27 |
| 77 | 8 | 13 | 16 | 9.0 | 205.1 | 11.2 | 196.0 | 12.9 | 242.9 | 22.1 | 22.0 | 21.5 | 15.5 | -0.58 | 4.20 | 0.18 |
| 77 | 8 | 13 | 17 | 8.2 | 259.8 | 9.3 | 252.5 | 9.9 | 259.7 | 23.0 | 22.9 | 22.4 | 15.0 | -0.61 | 4.20 | 0.26 |
| 77 | 8 | 13 | 18 | 8.6 | 303.2 | 10.3 | 295.8 | 11.4 | 304.3 | 22.4 | 22.5 | 21.9 | 15.3 | -0.44 | 4.20 | 0.15 |
| 77 | 8 | 13 | 19 | 5.9 | 285.9 | 6.7 | 289.8 | 7.3 | 303.7 | 21.6 | 22.0 | 21.6 | 15.6 | -0.01 | 4.20 | 0.05 |
| 77 | 8 | 13 | 20 | 6.0 | 277.3 | 5.8 | 282.9 | 5.7 | 299.6 | 21.5 | 21.6 | 21.6 | 16.0 | 0.05 | 4.20 | 0.01 |
| 77 | 8 | 13 | 21 | 4.4 | 285.1 | 4.1 | 285.3 | 3.5 | 298.4 | 21.6 | 21.5 | 21.5 | 15.9 | -0.08 | 4.20 | 0.01 |
| 77 | 8 | 13 | 22 | 2.6 | 238.3 | 2.1 | 234.6 | 1.8 | 247.7 | 21.3 | 20.4 | 21.5 | 16.2 | 0.11 | 4.20 | 0.01 |
| 77 | 8 | 13 | 23 | 3.2 | 230.6 | 2.6 | 199.6 | 2.2 | 149.6 | 20.7 | 20.2 | 21.1 | 16.4 | 0.39 | 4.20 | 0.01 |
| 77 | 8 | 13 | 24 | 5.1 | 244.0 | 4.2 | 220.0 | 3.6 | 197.2 | 20.9 | 20.8 | 21.0 | 16.1 | 0.11 | 4.20 | 0.01 |
| 77 | 8 | 14 | 1 | 5.3 | 258.2 | 4.4 | 244.0 | 3.5 | 233.8 | 21.1 | 20.9 | 21.0 | 16.1 | -0.03 | 4.20 | 0.01 |
| 77 | 8 | 14 | 2 | 4.8 | 249.4 | 4.1 | 232.6 | 3.7 | 218.0 | 21.0 | 20.8 | 20.9 | 16.1 | -0.09 | 4.20 | 0.01 |
| 77 | 8 | 14 | 3 | 2.5 | 187.4 | 2.5 | 102.8 | 3.1 | 145.1 | 18.9 | 18.9 | 19.8 | 17.1 | 0.87 | 4.20 | 0.01 |
| 77 | 8 | 14 | 4 | 2.7 | 243.6 | 2.2 | 275.6 | 2.5 | 407.8 | 18.2 | 17.4 | 19.1 | 17.5 | 0.89 | 4.20 | 0.01 |
| 77 | 8 | 14 | 5 | 4.4 | 277.0 | 4.5 | 297.3 | 4.5 | 325.3 | 18.4 | 18.4 | 19.0 | 17.2 | 0.61 | 4.20 | 0.01 |
| 77 | 8 | 14 | 6 | 3.6 | 268.9 | 3.4 | 258.8 | 2.9 | 248.2 | 18.8 | 18.8 | 19.2 | 16.9 | 0.34 | 4.20 | 0.09 |
| 77 | 8 | 14 | 7 | 5.2 | 266.2 | 5.7 | 255.1 | 5.8 | 259.8 | 19.9 | 20.1 | 19.6 | 16.1 | -0.26 | 4.20 | 0.28 |
| 77 | 8 | 14 | 8 | 6.1 | 220.2 | 6.9 | 214.0 | 7.0 | 219.7 | 21.4 | 21.4 | 20.7 | 15.5 | -0.70 | 4.20 | 0.59 |
| 77 | 8 | 14 | 9 | 7.4 | 291.1 | 7.9 | 282.4 | 8.5 | 288.3 | 22.3 | 22.1 | 21.5 | 15.2 | -0.84 | 4.20 | 0.89 |
| 77 | 8 | 14 | 10 | 8.7 | 293.3 | 9.7 | 283.2 | 10.3 | 290.6 | 23.8 | 23.3 | 22.7 | 14.6 | -1.01 | 4.20 | 1.14 |
| 77 | 8 | 14 | 11 | 8.2 | 282.6 | 9.1 | 275.8 | 9.8 | 281.1 | 24.7 | 24.3 | 23.7 | 13.9 | -1.06 | 4.20 | 1.12 |
| 77 | 8 | 14 | 12 | 7.7 | 263.3 | 8.4 | 250.0 | 9.4 | 253.7 | 24.9 | 24.6 | 23.9 | 14.1 | -0.95 | 4.20 | 0.62 |
| 77 | 8 | 14 | 13 | 12.6 | 329.4 | 13.9 | 321.4 | 15.0 | 330.0 | 24.1 | 23.6 | 23.1 | 14.7 | -1.05 | 4.20 | 0.81 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 14 | 14 | 7.6 | 81.0 | 8.5 | 71.8 | 9.4 | 77.3 | 23.9 | 23.7 | 23.1 | 14.5 | -0.79 | 4.20 | 0.40 |
| 77 | 8 | 14 | 15 | 11.9 | 298.8 | 13.3 | 287.1 | 14.1 | 293.7 | 24.3 | 23.7 | 23.3 | 14.5 | -1.02 | 4.20 | 0.91 |
| 77 | 8 | 14 | 16 | 5.5 | 318.4 | 6.0 | 308.8 | 6.4 | 312.1 | 24.5 | 24.4 | 23.7 | 14.1 | -0.84 | 4.20 | 0.49 |
| 77 | 8 | 14 | 17 | 6.4 | 273.4 | 7.1 | 264.6 | 7.7 | 265.4 | 24.6 | 24.5 | 23.9 | 14.3 | -0.69 | 4.20 | 0.35 |
| 77 | 8 | 14 | 18 | 5.1 | 259.8 | 5.7 | 255.5 | 6.0 | 261.3 | 23.7 | 23.6 | 23.2 | 14.9 | -0.50 | 4.20 | 0.12 |
| 77 | 8 | 14 | 19 | 7.5 | 257.7 | 9.1 | 251.6 | 10.1 | 260.7 | 22.8 | 22.9 | 22.7 | 15.3 | -0.10 | 4.20 | 0.02 |
| 77 | 8 | 14 | 20 | 11.3 | 299.1 | 14.4 | 291.3 | 17.4 | 300.8 | 20.6 | 20.8 | 20.6 | 16.2 | -0.06 | 4.20 | 0.01 |
| 77 | 8 | 14 | 21 | 5.3 | 385.8 | 6.3 | 379.8 | 7.3 | 392.6 | 19.7 | 19.8 | 19.7 | 16.7 | -0.00 | 4.20 | 0.01 |
| 77 | 8 | 14 | 22 | 3.4 | 238.9 | 2.9 | 229.3 | 2.7 | 232.0 | 19.6 | 19.7 | 20.0 | 16.8 | 0.38 | 4.20 | 0.01 |
| 77 | 8 | 14 | 23 | 6.4 | 238.1 | 6.2 | 215.7 | 5.9 | 199.8 | 19.5 | 19.7 | 19.7 | 16.7 | 0.17 | 4.20 | 0.01 |
| 77 | 8 | 14 | 24 | 6.9 | 249.0 | 8.0 | 225.4 | 8.9 | 214.7 | 19.3 | 19.8 | 19.8 | 16.7 | 0.48 | 4.20 | 0.01 |
| 77 | 8 | 15 | 1 | 6.4 | 257.4 | 7.2 | 234.6 | 9.3 | 224.8 | 19.4 | 19.7 | 19.7 | 16.7 | 0.35 | 4.20 | 0.01 |
| 77 | 8 | 15 | 2 | 7.3 | 268.1 | 8.0 | 240.4 | 12.1 | 231.1 | 18.7 | 19.1 | 19.4 | 17.0 | 0.67 | 4.20 | 0.01 |
| 77 | 8 | 15 | 3 | 9.8 | 266.1 | 11.8 | 251.8 | 13.6 | 245.8 | 18.8 | 19.4 | 19.5 | 16.9 | 0.69 | 4.20 | 0.01 |
| 77 | 8 | 15 | 4 | 10.0 | 263.8 | 12.7 | 253.2 | 15.2 | 255.0 | 18.4 | 18.8 | 18.8 | 17.1 | 0.38 | 4.20 | 0.01 |
| 77 | 8 | 15 | 5 | 9.4 | 263.7 | 12.5 | 254.5 | 14.9 | 257.3 | 18.1 | 18.4 | 18.3 | 17.3 | 0.20 | 4.20 | 0.01 |
| 77 | 8 | 15 | 6 | 4.5 | 320.5 | 5.2 | 301.3 | 6.2 | 211.9 | 18.1 | 18.2 | 18.1 | 17.4 | 0.03 | 4.20 | 0.06 |
| 77 | 8 | 15 | 7 | 4.2 | 178.5 | 5.5 | 185.6 | 6.6 | 206.6 | 18.6 | 18.6 | 18.2 | 16.9 | -0.34 | 4.20 | 0.15 |
| 77 | 8 | 15 | 8 | 7.6 | 237.3 | 9.0 | 225.9 | 10.4 | 231.8 | 19.1 | 19.0 | 18.4 | 16.8 | -0.66 | 4.20 | 0.27 |
| 77 | 8 | 15 | 9 | 9.3 | 244.2 | 10.3 | 231.6 | 11.4 | 237.0 | 20.5 | 20.2 | 19.6 | 16.2 | -0.89 | 4.20 | 0.51 |
| 77 | 8 | 15 | 10 | 9.8 | 230.5 | 11.4 | 220.4 | 12.1 | 232.3 | 21.2 | 20.8 | 20.3 | 16.1 | -0.93 | 4.20 | 0.64 |
| 77 | 8 | 15 | 11 | 10.4 | 270.9 | 11.6 | 260.1 | 12.7 | 264.5 | 22.1 | 21.6 | 21.1 | 15.3 | -1.04 | 4.20 | 1.07 |
| 77 | 8 | 15 | 12 | 10.3 | 265.7 | 11.5 | 258.9 | 12.5 | 264.8 | 22.8 | 22.3 | 21.9 | 15.0 | -0.94 | 4.20 | 0.92 |
| 77 | 8 | 15 | 13 | 13.9 | 286.7 | 15.7 | 278.5 | 17.2 | 285.3 | 22.4 | 21.7 | 21.3 | 15.4 | -1.07 | 4.20 | 0.81 |
| 77 | 8 | 15 | 14 | 5.7 | 345.8 | 6.4 | 333.7 | 6.9 | 336.9 | 21.4 | 21.3 | 20.8 | 15.9 | -0.63 | 4.20 | 0.15 |
| 77 | 8 | 15 | 15 | 5.5 | 257.7 | 6.3 | 253.7 | 7.0 | 263.8 | 18.8 | 18.8 | 18.4 | 20.3 | -0.42 | 4.20 | 0.14 |
| 77 | 8 | 15 | 16 | 6.5 | 182.7 | 7.9 | 177.2 | 8.7 | 188.2 | 17.8 | 18.0 | 17.6 | 25.7 | -0.20 | 4.20 | 0.13 |
| 77 | 8 | 15 | 17 | 5.5 | 305.6 | 6.6 | 267.4 | 7.1 | 266.9 | 17.6 | 17.9 | 17.8 | 28.3 | 0.16 | 4.20 | 0.06 |
| 77 | 8 | 15 | 18 | 5.8 | 134.4 | 7.7 | 119.0 | 8.9 | 119.1 | 15.0 | 15.1 | 14.7 | 52.4 | -0.23 | 4.24 | 0.03 |
| 77 | 8 | 15 | 19 | 6.3 | 239.1 | 6.7 | 217.7 | 6.4 | 205.3 | 14.2 | 14.6 | 14.4 | 56.5 | 0.18 | 4.28 | 0.02 |
| 77 | 8 | 15 | 20 | 7.1 | 228.8 | 10.3 | 210.1 | 11.5 | 207.9 | 14.3 | 14.9 | 14.8 | 52.7 | 0.47 | 4.28 | 0.01 |
| 77 | 8 | 15 | 21 | 7.8 | 201.2 | 10.8 | 191.3 | 13.1 | 196.2 | 13.8 | 14.2 | 14.0 | 56.2 | 0.28 | 4.28 | 0.01 |
| 77 | 8 | 15 | 22 | 4.6 | 298.2 | 6.0 | 288.1 | 6.6 | 228.6 | 13.9 | 14.0 | 14.1 | 54.9 | 0.26 | 4.32 | 0.02 |
| 77 | 8 | 15 | 23 | 3.1 | 277.6 | 3.0 | 323.4 | 4.0 | 171.8 | 13.4 | 13.4 | 14.0 | 58.8 | 0.61 | 4.32 | 0.02 |
| 77 | 8 | 15 | 24 | 3.7 | 242.5 | 4.7 | 206.8 | 6.0 | 192.9 | 13.6 | 14.3 | 14.4 | 52.2 | 0.85 | 4.32 | 0.02 |
| 77 | 8 | 16 | 1 | 6.2 | 234.5 | 8.1 | 212.9 | 9.6 | 203.5 | 14.1 | 15.0 | 15.0 | 44.8 | 0.93 | 4.32 | 0.01 |
| 77 | 8 | 16 | 2 | 5.0 | 274.4 | 5.4 | 261.4 | 6.1 | 250.4 | 15.2 | 15.6 | 15.5 | 35.2 | 0.25 | 4.32 | 0.01 |
| 77 | 8 | 16 | 3 | 4.7 | 290.8 | 4.9 | 227.3 | 5.6 | 208.0 | 15.8 | 16.3 | 16.3 | 31.3 | 0.51 | 4.32 | 0.01 |
| 77 | 8 | 16 | 4 | 3.0 | 128.4 | 3.3 | 77.1 | 3.2 | 75.7 | 13.3 | 13.9 | 14.2 | 49.2 | 0.96 | 4.32 | 0.01 |
| 77 | 8 | 16 | 5 | 1.9 | 255.8 | 1.8 | 337.6 | 3.2 | 124.7 | 12.8 | 12.7 | 12.9 | 58.7 | 0.09 | 4.32 | 0.01 |
| 77 | 8 | 16 | 6 | 4.2 | 240.2 | 3.8 | 217.1 | 3.8 | 195.4 | 13.2 | 13.1 | 13.3 | 55.2 | 0.11 | 4.32 | 0.03 |
| 77 | 8 | 16 | 7 | 4.8 | 230.0 | 4.2 | 203.8 | 4.3 | 187.1 | 14.4 | 14.9 | 14.5 | 43.4 | 0.04 | 4.32 | 0.19 |
| 77 | 8 | 16 | 8 | 2.8 | 170.8 | 2.9 | 164.5 | 3.3 | 192.3 | 16.1 | 16.6 | 15.7 | 31.9 | -0.35 | 4.32 | 0.38 |
| 77 | 8 | 16 | 9 | 3.3 | 158.3 | 3.6 | 152.3 | 3.7 | 158.4 | 18.0 | 18.6 | 17.4 | 22.9 | -0.56 | 4.32 | 0.80 |
| 77 | 8 | 16 | 10 | 4.0 | 138.7 | 4.3 | 128.6 | 4.5 | 134.4 | 19.8 | 20.3 | 19.1 | 17.3 | -0.68 | 4.32 | 1.07 |
| 77 | 8 | 16 | 11 | 4.9 | 384.0 | 5.1 | 388.2 | 5.3 | 412.2 | 21.0 | 21.5 | 20.3 | 14.9 | -0.69 | 4.32 | 1.06 |
| 77 | 8 | 16 | 12 | 4.7 | 307.9 | 5.1 | 302.0 | 5.4 | 309.8 | 20.4 | 20.5 | 19.8 | 17.3 | -0.61 | 4.32 | 0.21 |
| 77 | 8 | 16 | 13 | 3.9 | 388.1 | 4.2 | 376.1 | 4.3 | 397.4 | 20.4 | 20.5 | 19.9 | 17.0 | -0.54 | 4.32 | 0.22 |
| 77 | 8 | 16 | 14 | 4.4 | 192.9 | 5.5 | 190.9 | 5.9 | 206.8 | 19.8 | 19.9 | 19.5 | 21.1 | -0.32 | 4.36 | 0.49 |
| 77 | 8 | 16 | 15 | 5.4 | 179.8 | 6.2 | 173.5 | 6.7 | 182.0 | 22.3 | 22.4 | 21.6 | 14.4 | -0.71 | 4.36 | 1.05 |
| 77 | 8 | 16 | 16 | 5.9 | 176.8 | 6.2 | 166.9 | 6.6 | 166.3 | 23.0 | 23.2 | 22.3 | 14.0 | -0.69 | 4.36 | 0.71 |
| 77 | 8 | 16 | 17 | 5.2 | 169.0 | 5.7 | 161.2 | 5.8 | 170.0 | 22.6 | 22.6 | 22.0 | 15.1 | -0.54 | 4.36 | 0.18 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 16 | 18 | 7.2 | 157.0 | 8.7 | 150.0 | 9.4 | 160.9 | 22.4 | 22.4 | 21.9 | 15.2 | -0.50 | 4.36 | 0.16 |
| 77 | 8 | 16 | 19 | 5.5 | 205.1 | 7.5 | 196.1 | 8.6 | 203.6 | 20.8 | 21.0 | 20.7 | 16.4 | -0.06 | 4.36 | 0.03 |
| 77 | 8 | 16 | 20 | 6.6 | 246.6 | 7.1 | 231.6 | 8.0 | 220.6 | 19.7 | 20.2 | 20.3 | 17.0 | 0.63 | 4.36 | 0.01 |
| 77 | 8 | 16 | 21 | 7.0 | 261.5 | 8.2 | 237.0 | 12.3 | 230.4 | 18.8 | 19.2 | 19.5 | 17.9 | 0.65 | 4.36 | 0.01 |
| 77 | 8 | 16 | 22 | 9.6 | 260.3 | 10.7 | 240.4 | 13.4 | 233.5 | 19.0 | 19.4 | 19.7 | 18.3 | 0.73 | 4.36 | 0.01 |
| 77 | 8 | 16 | 23 | 11.4 | 258.5 | 12.1 | 245.7 | 12.5 | 238.1 | 19.3 | 20.0 | 20.1 | 17.9 | 0.75 | 4.36 | 0.01 |
| 77 | 8 | 16 | 24 | 5.7 | 365.6 | 5.4 | 368.5 | 5.2 | 351.6 | 18.0 | 18.8 | 19.1 | 19.7 | 1.08 | 4.36 | 0.01 |
| 77 | 8 | 17 | 1 | 3.8 | 303.5 | 3.3 | 316.9 | 2.9 | 375.8 | 17.1 | 17.3 | 17.6 | 21.4 | 0.46 | 4.36 | 0.01 |
| 77 | 8 | 17 | 2 | 3.3 | 290.7 | 3.0 | 298.3 | 3.2 | 335.5 | 18.0 | 17.9 | 18.3 | 19.3 | 0.33 | 4.36 | 0.01 |
| 77 | 8 | 17 | 3 | 3.8 | 328.9 | 4.0 | 353.2 | 4.4 | 371.5 | 17.5 | 17.8 | 18.0 | 19.6 | 0.43 | 4.36 | 0.01 |
| 77 | 8 | 17 | 4 | 4.4 | 324.5 | 4.9 | 330.3 | 5.6 | 355.4 | 16.9 | 17.1 | 17.0 | 21.2 | 0.07 | 4.36 | 0.01 |
| 77 | 8 | 17 | 5 | 3.6 | 305.2 | 4.1 | 313.9 | 4.4 | 346.3 | 16.6 | 16.9 | 16.8 | 21.8 | 0.18 | 4.36 | 0.01 |
| 77 | 8 | 17 | 6 | 2.2 | 341.1 | 2.5 | 380.4 | 2.9 | 397.8 | 16.3 | 16.2 | 16.1 | 23.7 | -0.10 | 4.36 | 0.04 |
| 77 | 8 | 17 | 7 | 2.8 | 385.8 | 2.9 | 395.5 | 3.1 | 410.8 | 16.6 | 16.9 | 16.4 | 24.3 | -0.21 | 4.36 | 0.25 |
| 77 | 8 | 17 | 8 | 3.4 | 92.0 | 3.6 | 91.1 | 3.7 | 97.2 | 16.8 | 17.3 | 16.3 | 21.2 | -0.52 | 4.36 | 0.25 |
| 77 | 8 | 17 | 9 | 2.7 | 122.8 | 2.9 | 91.2 | 3.2 | 124.3 | 18.7 | 19.1 | 18.0 | 18.0 | -0.70 | 4.36 | 0.47 |
| 77 | 8 | 17 | 10 | 4.0 | 387.0 | 4.1 | 366.3 | 4.1 | 395.7 | 20.5 | 21.0 | 19.9 | 16.3 | -0.62 | 4.36 | 0.61 |
| 77 | 8 | 17 | 11 | 7.3 | 256.7 | 9.1 | 221.3 | 11.0 | 264.8 | 18.2 | 18.6 | 17.9 | 33.3 | -0.38 | 4.45 | 0.17 |
| 77 | 8 | 17 | 12 | 6.2 | 239.0 | 8.2 | 207.1 | 9.8 | 248.8 | 16.6 | 17.0 | 16.4 | 50.7 | -0.13 | 4.54 | 0.31 |
| 77 | 8 | 17 | 13 | 7.6 | 276.7 | 8.5 | 253.4 | 9.5 | 277.0 | 17.5 | 17.8 | 16.8 | 43.8 | -0.64 | 4.56 | 0.36 |
| 77 | 8 | 17 | 14 | 6.7 | 274.0 | 7.2 | 259.1 | 7.5 | 264.1 | 17.2 | 17.3 | 16.6 | 43.8 | -0.58 | 4.56 | 0.30 |
| 77 | 8 | 17 | 15 | 5.3 | 146.8 | 5.7 | 136.6 | 5.7 | 145.4 | 17.4 | 17.5 | 16.8 | 36.5 | -0.57 | 4.56 | 0.36 |
| 77 | 8 | 17 | 16 | 6.9 | 76.6 | 7.4 | 62.0 | 7.6 | 78.2 | 16.4 | 16.6 | 15.8 | 47.6 | -0.63 | 4.56 | 0.51 |
| 77 | 8 | 17 | 17 | 5.7 | 109.8 | 6.2 | 78.3 | 6.4 | 114.1 | 16.5 | 16.7 | 16.0 | 49.1 | -0.54 | 4.56 | 0.19 |
| 77 | 8 | 17 | 18 | 3.7 | 162.3 | 3.9 | 124.8 | 4.1 | 160.2 | 16.6 | 16.7 | 16.1 | 48.7 | -0.49 | 4.56 | 0.10 |
| 77 | 8 | 17 | 19 | 3.9 | 239.2 | 4.4 | 202.5 | 4.7 | 242.8 | 16.0 | 16.1 | 15.7 | 56.1 | -0.31 | 4.58 | 0.02 |
| 77 | 8 | 17 | 20 | 2.4 | 174.0 | 2.6 | 385.8 | 3.5 | 411.1 | 15.1 | 15.3 | 15.2 | 70.5 | 0.02 | 4.82 | 0.02 |
| 77 | 8 | 17 | 21 | 3.4 | 238.9 | 4.2 | 190.2 | 4.9 | 275.5 | 14.7 | 15.1 | 14.8 | 74.9 | 0.04 | 4.88 | 0.02 |
| 77 | 8 | 17 | 22 | 2.1 | 361.3 | 2.2 | 294.6 | 2.1 | 248.6 | 14.6 | 14.9 | 14.8 | 74.6 | 0.21 | 4.88 | 0.02 |
| 77 | 8 | 17 | 23 | 2.0 | 357.7 | 2.0 | 357.8 | 1.9 | 325.3 | 14.4 | 14.6 | 14.7 | 74.8 | 0.36 | 4.88 | 0.02 |
| 77 | 8 | 17 | 24 | 4.3 | 278.6 | 5.8 | 243.9 | 7.6 | 285.8 | 14.3 | 15.2 | 15.0 | 62.3 | 0.73 | 4.88 | 0.02 |
| 77 | 8 | 18 | 1 | 5.2 | 274.5 | 6.9 | 246.2 | 8.5 | 288.8 | 14.6 | 15.1 | 14.8 | 60.0 | 0.18 | 4.88 | 0.02 |
| 77 | 8 | 18 | 2 | 3.3 | 248.0 | 3.7 | 236.6 | 5.3 | 296.8 | 14.4 | 14.7 | 14.4 | 63.1 | 0.06 | 4.88 | 0.02 |
| 77 | 8 | 18 | 3 | 3.7 | 252.9 | 4.6 | 231.5 | 5.9 | 265.4 | 14.4 | 14.3 | 14.6 | 63.4 | 0.19 | 4.88 | 0.02 |
| 77 | 8 | 18 | 4 | 7.0 | 295.8 | 8.7 | 253.2 | 10.6 | 284.6 | 14.8 | 15.1 | 14.8 | 59.0 | 0.08 | 4.88 | 0.01 |
| 77 | 8 | 18 | 5 | 8.9 | 295.3 | 9.7 | 242.1 | 13.7 | 270.7 | 14.5 | 14.9 | 14.9 | 58.9 | 0.39 | 4.88 | 0.01 |
| 77 | 8 | 18 | 6 | 8.1 | 292.3 | 8.7 | 230.9 | 14.4 | 268.9 | 14.9 | 15.2 | 15.0 | 58.0 | 0.04 | 4.88 | 0.05 |
| 77 | 8 | 18 | 7 | 7.3 | 266.6 | 8.0 | 233.5 | 12.5 | 268.2 | 15.6 | 15.8 | 15.4 | 54.5 | -0.20 | 4.88 | 0.12 |
| 77 | 8 | 18 | 8 | 4.8 | 264.3 | 5.8 | 223.9 | 8.7 | 264.5 | 15.8 | 16.0 | 15.4 | 54.6 | -0.36 | 4.88 | 0.12 |
| 77 | 8 | 18 | 9 | 5.6 | 281.2 | 6.3 | 236.9 | 7.0 | 273.7 | 16.8 | 17.0 | 16.2 | 49.5 | -0.60 | 4.88 | 0.53 |
| 77 | 8 | 18 | 10 | 8.6 | 285.9 | 9.5 | 242.4 | 10.7 | 279.6 | 18.0 | 17.9 | 17.2 | 44.5 | -0.77 | 4.88 | 0.72 |
| 77 | 8 | 18 | 11 | 9.2 | 310.9 | 10.3 | 268.3 | 11.6 | 305.1 | 18.2 | 18.2 | 17.5 | 41.5 | -0.74 | 4.88 | 0.48 |
| 77 | 8 | 18 | 12 | 6.5 | 284.4 | 7.4 | 242.4 | 8.7 | 286.1 | 17.8 | 17.8 | 17.2 | 45.4 | -0.62 | 4.92 | 0.61 |
| 77 | 8 | 18 | 13 | 8.7 | 267.6 | 10.3 | 224.6 | 12.1 | 269.7 | 19.8 | 19.6 | 18.7 | 35.8 | -1.11 | 4.92 | 1.22 |
| 77 | 8 | 18 | 14 | 9.2 | 278.0 | 10.7 | 236.1 | 12.2 | 278.0 | 21.5 | 21.1 | 20.4 | 24.4 | -1.07 | 4.92 | 1.21 |
| 77 | 8 | 18 | 15 | 10.4 | 306.1 | 12.2 | 261.5 | 13.3 | 298.5 | 22.6 | 22.2 | 21.6 | 17.7 | -0.95 | 4.92 | 1.00 |
| 77 | 8 | 18 | 16 | 11.8 | 301.1 | 13.8 | 260.0 | 15.4 | 298.1 | 23.2 | 22.9 | 22.4 | 15.7 | -0.79 | 4.92 | 0.57 |
| 77 | 8 | 18 | 17 | 11.2 | 302.3 | 13.4 | 259.2 | 15.2 | 296.8 | 23.2 | 23.1 | 22.5 | 15.4 | -0.67 | 4.92 | 0.46 |
| 77 | 8 | 18 | 18 | 11.0 | 310.9 | 13.7 | 269.3 | 15.4 | 310.4 | 22.8 | 23.1 | 22.3 | 15.5 | -0.46 | 4.92 | 0.21 |
| 77 | 8 | 18 | 19 | 9.0 | 344.2 | 12.4 | 307.6 | 14.6 | 350.6 | 20.5 | 21.3 | 20.9 | 18.8 | 0.39 | 4.92 | 0.03 |
| 77 | 8 | 18 | 20 | 9.9 | 68.0 | 12.1 | 27.0 | 13.4 | 66.8 | 16.0 | 16.1 | 15.6 | 41.7 | -0.38 | 4.92 | 0.01 |
| 77 | 8 | 18 | 21 | 3.6 | 420.5 | 4.9 | 383.2 | 5.6 | 66.9 | 14.3 | 14.4 | 14.1 | 52.8 | -0.28 | 4.92 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 18 | 22 | 3.7 | 343.1 | 5.3 | 318.7 | 5.4 | 20.0 | 14.0 | 14.3 | 14.0 | 52.6 | -0.01 | 4.92 | 0.01 |
| 77 | 8 | 18 | 23 | 1.7 | 324.8 | 2.5 | 310.3 | 1.8 | 398.2 | 14.2 | 14.1 | 14.2 | 51.5 | -0.06 | 4.92 | 0.01 |
| 77 | 8 | 18 | 24 | 1.7 | 312.3 | 3.2 | 302.5 | 2.1 | 15.4 | 14.1 | 14.2 | 14.2 | 52.7 | 0.08 | 4.92 | 0.01 |
| 77 | 8 | 19 | 1 | 1.0 | 335.9 | 2.4 | 305.6 | 1.3 | 18.4 | 14.0 | 13.5 | 14.0 | 54.9 | 0.03 | 4.92 | 0.00 |
| 77 | 8 | 19 | 2 | 1.2 | 319.9 | 2.7 | 281.1 | 2.2 | 329.6 | 14.1 | 13.9 | 14.1 | 55.4 | 0.05 | 4.92 | 0.00 |
| 77 | 8 | 19 | 3 | 2.2 | 298.9 | 3.3 | 261.8 | 2.7 | 296.3 | 14.5 | 14.4 | 14.4 | 49.9 | -0.09 | 4.92 | 0.00 |
| 77 | 8 | 19 | 4 | 2.1 | 309.1 | 3.2 | 276.9 | 2.4 | 312.5 | 14.7 | 14.7 | 14.8 | 43.5 | 0.02 | 4.92 | 0.00 |
| 77 | 8 | 19 | 5 | 1.4 | 280.2 | 2.5 | 224.8 | 2.0 | 243.8 | 15.0 | 14.6 | 14.9 | 42.8 | -0.10 | 4.92 | 0.00 |
| 77 | 8 | 19 | 6 | 2.7 | 278.8 | 4.0 | 223.6 | 3.4 | 242.0 | 15.1 | 15.2 | 15.1 | 43.9 | -0.01 | 4.92 | 0.07 |
| 77 | 8 | 19 | 7 | 1.6 | 218.1 | 3.5 | 172.4 | 3.2 | 207.9 | 16.0 | 16.8 | 15.7 | 35.6 | -0.36 | 4.92 | 0.30 |
| 77 | 8 | 19 | 8 | 3.2 | 109.9 | 5.0 | 68.4 | 4.9 | 113.7 | 16.4 | 17.1 | 15.9 | 30.8 | -0.47 | 4.92 | 0.59 |
| 77 | 8 | 19 | 9 | 3.8 | 125.8 | 5.7 | 80.7 | 6.5 | 130.6 | 17.6 | 17.9 | 16.9 | 23.2 | -0.66 | 4.92 | 0.86 |
| 77 | 8 | 19 | 10 | 4.7 | 91.4 | 6.3 | 49.1 | 6.4 | 95.0 | 19.2 | 19.5 | 18.5 | 19.6 | -0.72 | 4.92 | 0.92 |
| 77 | 8 | 19 | 11 | 5.2 | 103.3 | 7.4 | 58.9 | 7.8 | 99.4 | 19.4 | 19.5 | 18.7 | 20.5 | -0.63 | 4.92 | 0.35 |
| 77 | 8 | 19 | 12 | 8.2 | 84.9 | 9.7 | 44.7 | 10.1 | 82.0 | 19.4 | 19.4 | 18.7 | 22.3 | -0.69 | 4.92 | 0.52 |
| 77 | 8 | 19 | 13 | 10.9 | 60.8 | 12.4 | 25.1 | 12.5 | 61.4 | 20.6 | 20.5 | 19.7 | 19.9 | -0.82 | 4.92 | 0.68 |
| 77 | 8 | 19 | 14 | 16.0 | 71.6 | 18.1 | 37.2 | 18.9 | 71.2 | 19.9 | 19.6 | 18.9 | 21.6 | -0.97 | 4.92 | 0.61 |
| 77 | 8 | 19 | 15 | 13.7 | 67.3 | 15.5 | 34.2 | 16.2 | 68.6 | 19.3 | 19.1 | 18.5 | 22.5 | -0.80 | 4.92 | 0.46 |
| 77 | 8 | 19 | 16 | 11.0 | 70.3 | 12.3 | 37.2 | 12.5 | 70.8 | 19.3 | 19.2 | 18.5 | 20.1 | -0.82 | 4.92 | 0.69 |
| 77 | 8 | 19 | 17 | 6.7 | 101.2 | 7.6 | 68.1 | 8.2 | 103.0 | 20.0 | 20.2 | 19.3 | 17.0 | -0.65 | 4.92 | 0.51 |
| 77 | 8 | 19 | 18 | 4.9 | 116.4 | 6.1 | 82.1 | 6.9 | 115.4 | 19.5 | 19.7 | 18.9 | 17.1 | -0.57 | 4.92 | 0.17 |
| 77 | 8 | 19 | 19 | 2.5 | 393.2 | 4.7 | 373.0 | 6.2 | 64.1 | 18.2 | 18.3 | 18.2 | 23.7 | -0.01 | 4.92 | 0.02 |
| 77 | 8 | 19 | 20 | 1.9 | 294.4 | 3.2 | 301.9 | 3.5 | 360.1 | 17.6 | 17.5 | 17.6 | 26.3 | 0.02 | 4.92 | 0.01 |
| 77 | 8 | 19 | 21 | 0.9 | 293.9 | 2.1 | 268.4 | 1.9 | 363.9 | 17.4 | 17.1 | 17.5 | 29.0 | 0.15 | 4.92 | 0.01 |
| 77 | 8 | 19 | 22 | 1.5 | 241.2 | 3.0 | 191.5 | 2.9 | 211.6 | 17.2 | 17.3 | 17.4 | 28.3 | 0.22 | 4.92 | 0.01 |
| 77 | 8 | 19 | 23 | 1.0 | 246.0 | 2.7 | 191.5 | 3.0 | 202.8 | 16.9 | 17.0 | 17.0 | 29.2 | 0.06 | 4.92 | 0.01 |
| 77 | 8 | 19 | 24 | 0.9 | 237.6 | 1.8 | 212.5 | 1.5 | 212.7 | 16.8 | 16.4 | 16.7 | 29.3 | -0.09 | 4.92 | 0.01 |
| 77 | 8 | 20 | 1 | 1.2 | 288.9 | 1.8 | 399.2 | 2.1 | 104.2 | 16.3 | 15.6 | 16.5 | 31.7 | 0.16 | 4.92 | 0.01 |
| 77 | 8 | 20 | 2 | 1.5 | 252.6 | 2.0 | 295.9 | 1.8 | 168.1 | 16.2 | 15.4 | 16.2 | 33.9 | 0.04 | 4.92 | 0.01 |
| 77 | 8 | 20 | 3 | 2.6 | 266.9 | 3.6 | 250.4 | 3.2 | 287.7 | 16.0 | 15.9 | 16.4 | 31.5 | 0.36 | 4.92 | 0.01 |
| 77 | 8 | 20 | 4 | 3.5 | 290.0 | 4.9 | 279.1 | 4.0 | 317.4 | 15.9 | 16.4 | 16.4 | 28.1 | 0.45 | 4.92 | 0.01 |
| 77 | 8 | 20 | 5 | 9.1 | 290.1 | 8.9 | 265.1 | 7.5 | 310.8 | 15.7 | 16.6 | 16.5 | 30.6 | 0.71 | 4.92 | 0.01 |
| 77 | 8 | 20 | 6 | 6.5 | 316.8 | 7.9 | 288.7 | 7.2 | 326.6 | 15.2 | 16.4 | 16.1 | 30.9 | 0.90 | 4.92 | 0.07 |
| 77 | 8 | 20 | 7 | 2.1 | [illegible] | 2.8 | 416.2 | 3.0 | 420.1 | 15.9 | 17.0 | 15.7 | 24.6 | -0.15 | 4.92 | 0.29 |
| 77 | 8 | 20 | 8 | 4.5 | 103.5 | 5.0 | 64.2 | 4.8 | 106.1 | 17.0 | 17.7 | 16.6 | 21.9 | -0.45 | 4.92 | 0.58 |
| 77 | 8 | 20 | 9 | 5.1 | 102.5 | 5.5 | 69.4 | 5.7 | 111.1 | 18.6 | 19.1 | 18.1 | 18.6 | -0.57 | 4.92 | 0.84 |
| 77 | 8 | 20 | 10 | 5.6 | 106.5 | 6.3 | 70.4 | 6.8 | 102.8 | 20.1 | 20.2 | 19.5 | 16.8 | -0.58 | 4.92 | 0.89 |
| 77 | 8 | 20 | 11 | 7.5 | 375.0 | 8.6 | 340.9 | 9.3 | 370.3 | 21.2 | 21.2 | 20.5 | 16.3 | -0.71 | 4.92 | 0.63 |
| 77 | 8 | 20 | 12 | 11.4 | 344.5 | 12.9 | 304.6 | 13.8 | 339.6 | 22.3 | 21.7 | 21.2 | 15.8 | -1.09 | 4.92 | 1.08 |
| 77 | 8 | 20 | 13 | 11.4 | 329.1 | 12.9 | 295.8 | 13.5 | 328.4 | 23.4 | 22.6 | 22.1 | 15.0 | -1.24 | 4.92 | 1.29 |
| 77 | 8 | 20 | 14 | 10.9 | 324.1 | 12.0 | 286.8 | 12.5 | 321.7 | 23.5 | 23.1 | 22.6 | 14.9 | -0.92 | 4.92 | 0.74 |
| 77 | 8 | 20 | 15 | 9.3 | 326.0 | 10.7 | 288.1 | 11.4 | 321.3 | 23.7 | 23.4 | 22.8 | 14.7 | -0.93 | 4.92 | 0.66 |
| 77 | 8 | 20 | 16 | 11.9 | 342.0 | 13.4 | 306.6 | 14.2 | 337.2 | 23.9 | 23.6 | 23.0 | 14.7 | -0.92 | 4.92 | 0.57 |
| 77 | 8 | 20 | 17 | 14.8 | 47.8 | 17.0 | 373.9 | 17.8 | 47.1 | 21.1 | 21.0 | 20.4 | 15.9 | -0.74 | 4.92 | 0.27 |
| 77 | 8 | 20 | 18 | 5.8 | 108.0 | 6.7 | 73.2 | 7.0 | 104.7 | 20.0 | 20.2 | 19.5 | 15.8 | -0.59 | 4.92 | 0.22 |
| 77 | 8 | 20 | 19 | 5.8 | 215.0 | 7.1 | 180.9 | 7.5 | 211.9 | 19.2 | 19.4 | 18.9 | 16.8 | -0.30 | 4.92 | 0.02 |
| 77 | 8 | 20 | 20 | 4.8 | 285.5 | 6.1 | 239.0 | 6.9 | 248.6 | 18.6 | 19.0 | 18.9 | 17.3 | 0.28 | 4.92 | 0.01 |
| 77 | 8 | 20 | 21 | 4.3 | 307.5 | 5.0 | 280.1 | 5.6 | 310.7 | 18.9 | 19.3 | 19.4 | 17.2 | 0.56 | 4.92 | 0.01 |
| 77 | 8 | 20 | 22 | 12.7 | 337.1 | 15.3 | 308.4 | 16.9 | 341.2 | 18.7 | 19.1 | 18.7 | 17.0 | 0.02 | 4.92 | 0.01 |
| 77 | 8 | 20 | 23 | 12.5 | 332.1 | 15.1 | 304.4 | 17.3 | 338.0 | 16.6 | 17.0 | 16.7 | 18.7 | 0.10 | 4.92 | 0.01 |
| 77 | 8 | 20 | 24 | 4.9 | 263.7 | 5.8 | 226.1 | 5.9 | 176.9 | 17.1 | 17.4 | 17.5 | 18.0 | 0.41 | 4.92 | 0.01 |
| 77 | 8 | 21 | 1 | 4.9 | 308.6 | 4.4 | 287.7 | 3.5 | 279.8 | 16.8 | 16.9 | 17.2 | 18.3 | 0.49 | 4.92 | 0.01 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 21 | 2 | 3.4 | 263.0 | 3.5 | 261.9 | 3.1 | 309.4 | 16.7 | 16.8 | 17.4 | 18.4 | 0.77 | 4.92 | 0.01 |
| 77 | 8 | 21 | 3 | 4.8 | 249.5 | 4.3 | 203.9 | 4.3 | 310.8 | 16.4 | 16.8 | 17.1 | 18.2 | 0.70 | 4.92 | 0.00 |
| 77 | 8 | 21 | 4 | 1.5 | 244.1 | 1.9 | 311.4 | 1.9 | 371.8 | 15.1 | 14.0 | 15.8 | 20.4 | 0.61 | 4.92 | 0.01 |
| 77 | 8 | 21 | 5 | 1.5 | 302.8 | 3.2 | 306.1 | 2.4 | 350.8 | 15.4 | 15.5 | 16.2 | 19.4 | 0.80 | 4.92 | 0.01 |
| 77 | 8 | 21 | 6 | 4.4 | 271.6 | 4.9 | 242.5 | 3.8 | 269.6 | 15.8 | 16.6 | 16.5 | 18.8 | 0.76 | 4.92 | 0.08 |
| 77 | 8 | 21 | 7 | 4.6 | 232.0 | 5.7 | 209.3 | 5.7 | 238.1 | 17.9 | 18.3 | 17.8 | 17.1 | -0.12 | 4.92 | 0.32 |
| 77 | 8 | 21 | 8 | 2.5 | 129.9 | 3.4 | 108.2 | 3.1 | 133.5 | 17.4 | 17.8 | 17.2 | 16.9 | -0.16 | 4.92 | 0.26 |
| 77 | 8 | 21 | 9 | 6.3 | 265.9 | 7.4 | 243.7 | 8.0 | 277.5 | 18.2 | 18.3 | 17.7 | 17.1 | -0.51 | 4.92 | 0.29 |
| 77 | 8 | 21 | 10 | 8.7 | 288.9 | 10.0 | 261.9 | 10.8 | 286.8 | 18.0 | 18.0 | 17.4 | 17.4 | -0.66 | 4.92 | 0.25 |
| 77 | 8 | 21 | 11 | 6.6 | 221.5 | 8.0 | 201.1 | 9.4 | 232.8 | 17.7 | 17.8 | 17.2 | 17.9 | -0.54 | 4.92 | 0.19 |
| 77 | 8 | 21 | 12 | 4.3 | 128.9 | 5.2 | 106.4 | 5.4 | 132.3 | 19.2 | 19.6 | 18.6 | 15.9 | -0.59 | 4.92 | 0.89 |
| 77 | 8 | 21 | 13 | 8.2 | 341.1 | 9.1 | 316.5 | 9.9 | 340.4 | 22.2 | 22.0 | 21.3 | 14.5 | -0.91 | 4.92 | 1.28 |
| 77 | 8 | 21 | 14 | 10.3 | 313.6 | 11.7 | 288.0 | 12.9 | 311.4 | 23.7 | 23.2 | 22.5 | 14.5 | -1.22 | 4.92 | 1.18 |
| 77 | 8 | 21 | 15 | 13.9 | 334.0 | 15.5 | 307.9 | 16.4 | 332.2 | 23.7 | 23.2 | 22.7 | 14.8 | -1.05 | 4.92 | 1.00 |
| 77 | 8 | 21 | 16 | 12.0 | 317.9 | 13.7 | 296.1 | 14.9 | 322.3 | 23.5 | 23.2 | 22.6 | 15.0 | -0.91 | 4.92 | 0.54 |
| 77 | 8 | 21 | 17 | 9.3 | 269.4 | 11.2 | 246.3 | 13.3 | 275.5 | 20.8 | 20.9 | 20.4 | 18.3 | -0.36 | 4.92 | 0.22 |
| 77 | 8 | 21 | 18 | 7.8 | 225.3 | 9.7 | 202.6 | 11.0 | 228.1 | 18.5 | 18.7 | 18.5 | 20.2 | 0.02 | 4.92 | 0.12 |
| 77 | 8 | 21 | 19 | 4.0 | 309.5 | 4.6 | 289.9 | 5.0 | 310.1 | 18.8 | 19.1 | 19.2 | 19.3 | 0.42 | 4.92 | 0.02 |
| 77 | 8 | 21 | 20 | 5.2 | 306.0 | 6.2 | 293.3 | 7.0 | 322.1 | 18.9 | 19.6 | 19.8 | 17.6 | 0.90 | 4.92 | 0.01 |
| 77 | 8 | 21 | 21 | 3.7 | 297.3 | 3.6 | 283.6 | 3.1 | 298.6 | 18.9 | 18.9 | 19.0 | 17.7 | 0.12 | 4.92 | 0.01 |
| 77 | 8 | 21 | 22 | 2.3 | 300.3 | 3.0 | 325.8 | 3.2 | 343.5 | 17.5 | 17.7 | 18.0 | 19.0 | 0.55 | 4.92 | 0.01 |
| 77 | 8 | 21 | 23 | 3.3 | 338.4 | 4.2 | 351.9 | 4.5 | 29.5 | 15.8 | 16.3 | 16.9 | 23.0 | 1.05 | 4.92 | 0.01 |
| 77 | 8 | 21 | 24 | 2.4 | 283.6 | 2.8 | 268.3 | 2.6 | 368.4 | 15.2 | 15.1 | 15.8 | 26.8 | 0.55 | 4.92 | 0.01 |
| 77 | 8 | 22 | 1 | 4.0 | 311.1 | 4.2 | 307.0 | 3.7 | 349.3 | 16.6 | 16.8 | 17.0 | 21.7 | 0.35 | 4.92 | 0.01 |
| 77 | 8 | 22 | 2 | 3.4 | 260.8 | 3.3 | 262.8 | 3.6 | 310.1 | 16.7 | 17.0 | 17.4 | 19.4 | 0.74 | 4.92 | 0.01 |
| 77 | 8 | 22 | 3 | 4.0 | 315.3 | 3.9 | 308.5 | 2.7 | 331.0 | 16.1 | 16.6 | 17.0 | 19.7 | 0.93 | 4.92 | 0.01 |
| 77 | 8 | 22 | 4 | 3.3 | 337.6 | 3.4 | 346.0 | 3.2 | 400.5 | 15.2 | 15.2 | 15.6 | 22.2 | 0.46 | 4.92 | 0.01 |
| 77 | 8 | 22 | 5 | 3.4 | 342.0 | 3.3 | 346.2 | 4.1 | 392.9 | 13.6 | 13.4 | 14.1 | 29.6 | 0.51 | 4.92 | 0.01 |
| 77 | 8 | 22 | 6 | 1.7 | 270.8 | 2.0 | 267.8 | 2.0 | 406.7 | 14.4 | 14.8 | 15.0 | 25.7 | 0.55 | 4.92 | 0.06 |
| 77 | 8 | 22 | 7 | 1.8 | 137.3 | 2.1 | 121.2 | 2.2 | 108.5 | 15.7 | 17.3 | 15.5 | 19.0 | -0.21 | 4.92 | 0.29 |
| 77 | 8 | 22 | 8 | 3.5 | 93.9 | 3.7 | 71.1 | 3.8 | 100.8 | 17.4 | 18.5 | 16.9 | 17.4 | -0.45 | 4.92 | 0.57 |
| 77 | 8 | 22 | 9 | 5.4 | 206.9 | 6.3 | 189.2 | 6.5 | 215.2 | 19.6 | 19.8 | 18.8 | 16.4 | -0.78 | 4.92 | 0.85 |
| 77 | 8 | 22 | 10 | 6.7 | 322.3 | 7.7 | 294.9 | 8.6 | 315.4 | 21.1 | 20.8 | 20.1 | 15.8 | -0.98 | 4.92 | 1.04 |
| 77 | 8 | 22 | 11 | 7.4 | 363.1 | 8.0 | 337.3 | 8.1 | 356.2 | 21.8 | 21.6 | 20.8 | 15.2 | -1.01 | 4.92 | 1.16 |
| 77 | 8 | 22 | 12 | 8.9 | 345.5 | 9.6 | 319.5 | 10.2 | 339.2 | 23.0 | 22.5 | 21.8 | 14.7 | -1.19 | 4.92 | 1.29 |
| 77 | 8 | 22 | 13 | 10.5 | 311.1 | 11.8 | 287.8 | 12.3 | 311.2 | 23.8 | 23.1 | 22.6 | 14.4 | -1.19 | 4.92 | 1.34 |
| 77 | 8 | 22 | 14 | 9.5 | 297.3 | 10.9 | 274.3 | 11.7 | 298.5 | 24.1 | 23.5 | 22.9 | 14.4 | -1.13 | 4.92 | 1.14 |
| 77 | 8 | 22 | 15 | 10.2 | 295.1 | 11.5 | 269.9 | 12.3 | 295.7 | 24.5 | 24.1 | 23.6 | 14.2 | -0.96 | 4.92 | 0.94 |
| 77 | 8 | 22 | 16 | 12.4 | 304.2 | 13.9 | 279.6 | 15.0 | 303.3 | 24.9 | 24.4 | 23.9 | 14.2 | -0.94 | 4.92 | 0.76 |
| 77 | 8 | 22 | 17 | 11.3 | 321.0 | 13.1 | 294.8 | 14.3 | 315.8 | 24.6 | 24.4 | 23.8 | 14.4 | -0.83 | 4.92 | 0.49 |
| 77 | 8 | 22 | 18 | 8.0 | 320.9 | 9.4 | 299.1 | 10.2 | 323.3 | 23.9 | 24.3 | 23.5 | 14.7 | -0.37 | 4.92 | 0.16 |
| 77 | 8 | 22 | 19 | 5.2 | 300.5 | 5.6 | 292.8 | 6.0 | 321.3 | 23.0 | 23.3 | 23.1 | 15.3 | 0.15 | 4.92 | 0.02 |
| 77 | 8 | 22 | 20 | 11.2 | 264.1 | 13.0 | 235.3 | 14.0 | 253.3 | 20.7 | 21.3 | 21.2 | 16.1 | 0.50 | 4.92 | 0.01 |
| 77 | 8 | 22 | 21 | 4.8 | 164.8 | 6.7 | 133.7 | 8.2 | 150.7 | 18.1 | 18.7 | 18.6 | 17.6 | 0.45 | 4.92 | 0.01 |
| 77 | 8 | 22 | 22 | 4.4 | 261.4 | 4.2 | 226.8 | 4.2 | 223.6 | 17.4 | 17.6 | 17.5 | 18.1 | 0.10 | 4.92 | 0.01 |
| 77 | 8 | 22 | 23 | 11.5 | 286.2 | 14.4 | 267.1 | 16.7 | 292.3 | 17.7 | 18.3 | 18.1 | 17.6 | 0.38 | 4.92 | 0.01 |
| 77 | 8 | 22 | 24 | 9.0 | 271.1 | 11.2 | 246.9 | 12.6 | 269.6 | 17.5 | 18.3 | 18.2 | 17.5 | 0.70 | 4.92 | 0.01 |
| 77 | 8 | 23 | 1 | 9.6 | 269.3 | 12.0 | 254.5 | 12.6 | 285.6 | 17.4 | 18.5 | 18.6 | 17.6 | 1.21 | 4.92 | 0.01 |
| 77 | 8 | 23 | 2 | 9.4 | 263.7 | 10.7 | 243.9 | 11.9 | 273.1 | 17.2 | 18.0 | 18.0 | 17.7 | 0.75 | 4.92 | 0.01 |
| 77 | 8 | 23 | 3 | 6.5 | 250.8 | 6.9 | 221.6 | 7.7 | 247.7 | 17.3 | 17.8 | 17.6 | 17.6 | 0.28 | 4.92 | 0.01 |
| 77 | 8 | 23 | 4 | 7.1 | 244.8 | 8.7 | 222.8 | 10.6 | 252.6 | 15.9 | 16.4 | 16.4 | 18.3 | 0.49 | 4.92 | 0.01 |
| 77 | 8 | 23 | 5 | 11.0 | 277.3 | 14.5 | 262.0 | 17.4 | 291.3 | 16.0 | 17.1 | 17.4 | 18.3 | 1.39 | 4.92 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL. | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 23 | 6 | 7.9 | 352.9 | 10.0 | 325.7 | 12.1 | 342.2 | 16.3 | 17.8 | 17.7 | 17.9 | 1.43 | 4.92 | 0.07 |
| 77 | 8 | 23 | 7 | 4.7 | 81.9 | 5.4 | 62.9 | 5.7 | 85.9 | 16.8 | 17.7 | 16.8 | 17.3 | 0.08 | 4.92 | 0.29 |
| 77 | 8 | 23 | 8 | 4.0 | 90.1 | 4.5 | 68.8 | 4.7 | 91.1 | 18.1 | 18.8 | 17.5 | 16.6 | -0.52 | 4.92 | 0.57 |
| 77 | 8 | 23 | 9 | 4.6 | 148.1 | 5.1 | 127.5 | 5.2 | 157.1 | 20.1 | 20.4 | 19.4 | 15.5 | -0.69 | 4.92 | 0.84 |
| 77 | 8 | 23 | 10 | 7.3 | 240.9 | 8.0 | 218.2 | 8.3 | 241.0 | 22.4 | 22.2 | 21.4 | 14.9 | -0.95 | 4.92 | 1.07 |
| 77 | 8 | 23 | 11 | 10.8 | 273.5 | 11.9 | 247.9 | 12.7 | 270.8 | 23.8 | 23.3 | 22.7 | 14.5 | -1.12 | 4.92 | 1.23 |
| 77 | 8 | 23 | 12 | 11.8 | 314.1 | 13.0 | 289.3 | 13.7 | 311.1 | 24.3 | 23.6 | 23.1 | 14.3 | -1.17 | 4.92 | 1.13 |
| 77 | 8 | 23 | 13 | 9.7 | 316.1 | 10.9 | 291.6 | 12.1 | 316.2 | 25.1 | 24.5 | 24.0 | 13.8 | -1.08 | 4.92 | 1.29 |
| 77 | 8 | 23 | 14 | 8.9 | 301.0 | 9.9 | 274.7 | 10.7 | 296.3 | 25.7 | 25.2 | 24.5 | 13.4 | -1.22 | 4.92 | 1.18 |
| 77 | 8 | 23 | 15 | 9.5 | 315.8 | 10.3 | 293.3 | 11.1 | 317.0 | 25.6 | 25.2 | 24.6 | 13.7 | -1.00 | 4.92 | 0.98 |
| 77 | 8 | 23 | 16 | 9.9 | 273.0 | 11.2 | 249.7 | 12.5 | 270.5 | 25.3 | 25.0 | 24.3 | 14.0 | -0.93 | 4.92 | 0.56 |
| 77 | 8 | 23 | 17 | 9.4 | 239.3 | 11.1 | 217.5 | 13.4 | 247.4 | 24.1 | 24.0 | 23.3 | 14.6 | -0.78 | 4.92 | 0.30 |
| 77 | 8 | 23 | 18 | 9.0 | 278.6 | 9.9 | 243.8 | 12.5 | 259.4 | 22.9 | 23.0 | 22.5 | 15.2 | -0.41 | 4.92 | 0.11 |
| 77 | 8 | 23 | 19 | 9.9 | 281.5 | 12.4 | 254.0 | 15.0 | 270.5 | 21.8 | 22.2 | 22.1 | 15.6 | 0.27 | 4.92 | 0.02 |
| 77 | 8 | 23 | 20 | 8.7 | 268.8 | 10.9 | 245.3 | 13.6 | 265.2 | 21.8 | 22.3 | 22.2 | 15.6 | 0.37 | 4.92 | 0.01 |
| 77 | 8 | 23 | 21 | 10.3 | 271.1 | 11.6 | 236.1 | 16.7 | 251.9 | 19.8 | 19.9 | 19.5 | 16.4 | -0.29 | 4.92 | 0.01 |
| 77 | 8 | 23 | 22 | 12.8 | 280.0 | 13.6 | 242.8 | 18.8 | 257.1 | 19.4 | 19.6 | 19.2 | 16.7 | -0.14 | 4.92 | 0.01 |
| 77 | 8 | 23 | 23 | 10.8 | 283.8 | 11.9 | 247.8 | 15.5 | 260.8 | 19.4 | 19.7 | 19.4 | 16.5 | -0.05 | 4.92 | 0.01 |
| 77 | 8 | 23 | 24 | 9.3 | 299.8 | 10.5 | 211.3 | 13.6 | 241.6 | 19.7 | 19.9 | 19.6 | 16.4 | -0.07 | 4.92 | 0.01 |
| 77 | 8 | 24 | 1 | 3.5 | 80.9 | 4.8 | 62.1 | 5.1 | 91.6 | 18.7 | 19.0 | 18.9 | 16.9 | 0.23 | 4.92 | 0.01 |
| 77 | 8 | 24 | 2 | 4.1 | 207.6 | 5.1 | 186.0 | 5.7 | 214.1 | 18.7 | 18.7 | 18.4 | 16.9 | -0.29 | 4.92 | 0.01 |
| 77 | 8 | 24 | 3 | 5.8 | 235.1 | 7.6 | 206.4 | 8.8 | 230.5 | 17.9 | 18.1 | 17.7 | 17.3 | -0.22 | 4.92 | 0.01 |
| 77 | 8 | 24 | 4 | 4.6 | 240.5 | 6.1 | 215.1 | 7.7 | 238.6 | 17.3 | 17.5 | 17.1 | 17.8 | -0.17 | 4.92 | 0.01 |
| 77 | 8 | 24 | 5 | 4.8 | 233.3 | 7.1 | 207.5 | 9.0 | 226.8 | 16.8 | 17.1 | 16.9 | 18.5 | 0.05 | 4.92 | 0.01 |
| 77 | 8 | 24 | 6 | 4.8 | 234.7 | 6.0 | 209.1 | 7.2 | 231.3 | 17.0 | 17.2 | 16.8 | 18.3 | -0.20 | 4.92 | 0.02 |
| 77 | 8 | 24 | 7 | 3.7 | 204.3 | 5.3 | 175.3 | 6.5 | 200.0 | 16.5 | 16.6 | 16.2 | 19.3 | -0.27 | 4.92 | 0.05 |
| 77 | 8 | 24 | 8 | 5.1 | 180.5 | 6.7 | 165.9 | 7.5 | 197.0 | 16.8 | 16.9 | 16.4 | 18.7 | -0.40 | 4.92 | 0.14 |
| 77 | 8 | 24 | 9 | 12.0 | 213.4 | 14.8 | 191.8 | 16.4 | 221.2 | 18.6 | 18.3 | 17.8 | 17.3 | -0.78 | 4.92 | 0.56 |
| 77 | 8 | 24 | 10 | 13.0 | 224.0 | 18.0 | 199.3 | 20.5 | 235.4 | 20.3 | 19.7 | 19.2 | 16.4 | -1.10 | 4.92 | 0.82 |
| 77 | 8 | 24 | 11 | 14.4 | 236.3 | 19.7 | 208.5 | 22.9 | 242.6 | 20.6 | 20.0 | 19.5 | 16.3 | -1.08 | 4.92 | 0.85 |
| 77 | 8 | 24 | 12 | 16.0 | 227.9 | 19.9 | 199.6 | 25.0 | 235.5 | 22.4 | 21.3 | 21.1 | 15.4 | -1.29 | 4.92 | 1.25 |
| 77 | 8 | 24 | 13 | 16.1 | 228.7 | 20.8 | 199.8 | 23.3 | 235.5 | 22.0 | 21.2 | 20.9 | 15.7 | -1.09 | 2.46 | 0.68 |
| 77 | 8 | 24 | 14 | 14.1 | 242.3 | 18.3 | 202.1 | 21.0 | 251.2 | 19.6 | 18.8 | 18.3 | 17.1 | -1.28 | 4.92 | 0.99 |
| 77 | 8 | 24 | 15 | 16.8 | 259.8 | 21.1 | 204.1 | 25.6 | 250.8 | 20.1 | 19.1 | 18.8 | 16.9 | -1.27 | 4.92 | 1.05 |
| 77 | 8 | 24 | 16 | 10.9 | 264.9 | 13.0 | 229.1 | 15.2 | 264.8 | 20.1 | 19.8 | 19.2 | 16.7 | -0.97 | 4.92 | 0.61 |
| 77 | 8 | 24 | 17 | 10.7 | 237.5 | 13.8 | 202.6 | 16.4 | 243.7 | 19.1 | 19.0 | 18.4 | 17.7 | -0.73 | 4.92 | 0.20 |
| 77 | 8 | 24 | 18 | 9.4 | 241.2 | 12.1 | 218.7 | 16.6 | 238.8 | 17.1 | 17.1 | 16.8 | 30.9 | -0.27 | 4.97 | 0.10 |
| 77 | 8 | 24 | 19 | 5.4 | 239.9 | 7.7 | 224.1 | 13.8 | 227.1 | 16.2 | 16.5 | 16.5 | 37.9 | 0.30 | 5.00 | 0.02 |
| 77 | 8 | 24 | 20 | 6.5 | 268.7 | 7.6 | 242.8 | 11.8 | 243.8 | 16.5 | 16.8 | 16.7 | 33.0 | 0.12 | 5.00 | 0.01 |
| 77 | 8 | 24 | 21 | 4.8 | 245.8 | 5.5 | 237.6 | 6.1 | 242.2 | 16.1 | 16.7 | 16.6 | 34.8 | 0.45 | 5.00 | 0.01 |
| 77 | 8 | 24 | 22 | 4.5 | 202.8 | 6.3 | 191.5 | 7.1 | 209.3 | 15.1 | 15.6 | 15.7 | 40.7 | 0.53 | 5.03 | 0.01 |
| 77 | 8 | 24 | 23 | 6.2 | 217.7 | 8.8 | 207.5 | 12.1 | 215.8 | 13.8 | 14.3 | 14.2 | 52.5 | 0.37 | 5.08 | 0.02 |
| 77 | 8 | 24 | 24 | 5.8 | 242.3 | 7.9 | 226.3 | 12.5 | 223.5 | 14.2 | 14.7 | 14.7 | 40.5 | 0.46 | 5.08 | 0.01 |
| 77 | 8 | 25 | 1 | 12.4 | 292.4 | 14.9 | 280.1 | 17.2 | 288.3 | 14.6 | 15.1 | 14.7 | 41.9 | 0.13 | 5.08 | 0.01 |
| 77 | 8 | 25 | 2 | 11.8 | 298.3 | 14.9 | 289.1 | 17.6 | 302.6 | 11.5 | 12.0 | 9.4 | 57.5 | -2.08 | 5.35 | 0.01 |
| 77 | 8 | 25 | 3 | 6.3 | 186.4 | 7.6 | 180.9 | 8.4 | 204.2 | 10.4 | 11.6 | 7.8 | 64.8 | -2.70 | 4.14 | 0.01 |
| 77 | 8 | 25 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |

RIO BLANCO OIL SHALF PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPFRATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPFED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 25 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 25 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 26 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 27 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 27 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 16 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 17 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 18 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 19 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 20 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 21 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 22 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 23 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 28 | 24 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 1 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 2 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 3 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 4 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 5 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 6 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 7 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 8 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 10 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 11 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 12 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 13 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 14 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 15 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.9 | 999.90 | 99.90 | 999.90 |
| 77 | 8 | 29 | 16 | 5.7 | 274.7 | 6.5 | 255.9 | 7.3 | 263.8 | 18.9 | 20.3 | 18.1 | 20.7 | -0.72 | 0.00 | 0.59 |
| 77 | 8 | 29 | 17 | 6.7 | 254.6 | 8.3 | 242.8 | 9.8 | 253.9 | 21.5 | 21.6 | 20.7 | 15.0 | -0.78 | 0.00 | 0.39 |

RIO BLANCO OIL SHALE PROJECT

| DATE YR | MN | DY | HR | 10M WIND SPEED (MPH) | 10M WIND DIRECTION (DEGS) | 30M WIND SPEED (MPH) | 30M WIND DIRECTION (DEGS) | 60M WIND SPEED (MPH) | 60M WIND DIRECTION (DEGS) | TEMPERATURE 10M (C) | TEMPERATURE 30M (C) | TEMPERATURE 60M (C) | REL HUMID (%) | DT3-1 (C) | PRECIP (INCH) | SOLAR INSOL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 77 | 8 | 29 | 18 | 5.6 | 225.9 | 7.2 | 214.5 | 8.4 | 230.1 | 20.6 | 21.0 | 20.3 | 15.5 | -0.32 | 0.00 | 0.15 |
| 77 | 8 | 29 | 19 | 4.9 | 256.4 | 6.8 | 224.8 | 12.8 | 227.0 | 18.5 | 18.9 | 19.0 | 16.7 | 0.51 | 0.00 | 0.01 |
| 77 | 8 | 29 | 20 | 6.3 | 272.7 | 8.0 | 234.9 | 14.4 | 226.9 | 17.2 | 17.8 | 18.4 | 17.4 | 1.26 | 0.00 | 0.01 |
| 77 | 8 | 29 | 21 | 6.8 | 267.7 | 8.7 | 235.9 | 15.0 | 234.6 | 17.3 | 17.7 | 18.0 | 17.4 | 0.64 | 0.00 | 0.01 |
| 77 | 8 | 29 | 22 | 11.4 | 280.6 | 10.2 | 245.6 | 14.9 | 238.9 | 17.5 | 17.9 | 17.7 | 17.2 | 0.15 | 0.00 | 0.01 |
| 77 | 8 | 29 | 23 | 12.9 | 273.2 | 15.4 | 253.1 | 17.6 | 254.5 | 17.2 | 18.1 | 18.0 | 17.5 | 0.82 | 0.00 | 0.01 |
| 77 | 8 | 29 | 24 | 14.0 | 263.5 | 17.5 | 248.9 | 19.5 | 258.3 | 17.0 | 18.0 | 17.9 | 17.4 | 0.88 | 0.00 | 0.01 |
| 77 | 8 | 30 | 1 | 12.8 | 261.5 | 16.6 | 253.8 | 18.9 | 269.0 | 16.3 | 17.4 | 17.5 | 17.7 | 1.20 | 0.00 | 0.01 |
| 77 | 8 | 30 | 2 | 10.5 | 272.8 | 13.4 | 268.4 | 14.5 | 290.8 | 16.8 | 18.1 | 18.0 | 17.6 | 1.25 | 0.00 | 0.01 |
| 77 | 8 | 30 | 3 | 9.8 | 274.3 | 10.2 | 273.7 | 10.1 | 298.2 | 17.2 | 18.3 | 18.3 | 17.4 | 1.07 | 0.00 | 0.01 |
| 77 | 8 | 30 | 4 | 8.6 | 263.9 | 7.4 | 248.3 | 7.6 | 256.5 | 17.7 | 18.5 | 18.3 | 17.3 | 0.64 | 0.00 | 0.01 |
| 77 | 8 | 30 | 5 | 7.7 | 253.4 | 8.8 | 225.6 | 9.1 | 226.1 | 16.6 | 17.5 | 17.8 | 17.6 | 1.22 | 0.00 | 0.01 |
| 77 | 8 | 30 | 6 | 7.2 | 265.1 | 7.8 | 236.2 | 13.0 | 233.1 | 16.4 | 17.0 | 17.2 | 17.7 | 0.78 | 0.00 | 0.07 |
| 77 | 8 | 30 | 7 | 7.5 | 211.6 | 10.4 | 208.3 | 14.5 | 225.9 | 18.4 | 18.8 | 18.3 | 16.8 | -0.10 | 0.00 | 0.21 |
| 77 | 8 | 30 | 8 | 11.6 | 214.0 | 15.0 | 204.4 | 18.3 | 225.1 | 20.2 | 20.0 | 19.4 | 16.1 | -0.81 | 0.00 | 0.59 |
| 77 | 8 | 30 | 9 | 12.1 | 226.4 | 14.7 | 213.0 | 17.4 | 231.8 | 21.1 | 20.7 | 20.1 | 15.7 | -0.97 | 0.00 | 0.87 |
| 77 | 8 | 30 | 10 | 12.3 | 253.4 | 13.9 | 234.4 | 16.3 | 244.5 | 22.2 | 21.8 | 21.2 | 15.1 | -0.94 | 0.00 | 1.08 |
| 77 | 8 | 30 | 11 | 14.6 | 243.1 | 17.0 | 230.2 | 19.2 | 245.8 | 22.9 | 22.2 | 21.9 | 14.8 | -1.00 | 0.00 | 1.20 |
| 77 | 8 | 30 | 12 | 13.1 | 230.1 | 16.1 | 217.5 | 19.1 | 234.6 | 23.6 | 23.0 | 22.5 | 14.5 | -1.15 | 0.00 | 1.07 |
| 77 | 8 | 30 | 13 | 13.5 | 222.9 | 17.2 | 208.4 | 20.4 | 228.4 | 24.1 | 23.5 | 22.9 | 14.3 | -1.20 | 0.00 | 1.28 |
| 77 | 8 | 30 | 14 | 15.6 | 223.8 | 19.5 | 211.5 | 22.8 | 230.3 | 24.2 | 23.6 | 23.2 | 14.4 | -1.03 | 0.00 | 1.14 |
| 77 | 8 | 30 | 15 | 13.8 | 235.8 | 16.6 | 218.5 | 20.4 | 235.6 | 24.2 | 23.7 | 23.2 | 14.4 | -0.97 | 0.00 | 0.93 |
| 77 | 8 | 30 | 16 | 12.2 | 238.0 | 15.1 | 225.1 | 18.9 | 238.4 | 23.6 | 23.6 | 23.0 | 14.6 | -0.66 | 0.00 | 0.43 |
| 77 | 8 | 30 | 17 | 12.8 | 247.2 | 15.4 | 231.7 | 19.7 | 245.6 | 23.7 | 23.7 | 23.2 | 14.5 | -0.57 | 0.00 | 0.39 |
| 77 | 8 | 30 | 18 | 8.2 | 231.5 | 10.5 | 219.3 | 13.9 | 235.7 | 22.5 | 22.7 | 22.2 | 15.2 | -0.31 | 0.00 | 0.08 |
| 77 | 8 | 30 | 19 | 5.5 | 217.2 | 6.9 | 214.9 | 10.8 | 232.9 | 21.3 | 21.6 | 21.4 | 15.6 | 0.04 | 0.00 | 0.01 |
| 77 | 8 | 30 | 20 | 9.2 | 245.5 | 11.9 | 232.1 | 16.0 | 245.5 | 20.8 | 21.2 | 20.9 | 15.8 | 0.10 | 0.00 | 0.01 |
| 77 | 8 | 30 | 21 | 7.2 | 286.3 | 7.9 | 279.3 | 8.8 | 294.7 | 20.7 | 21.2 | 20.9 | 15.9 | 0.20 | 0.00 | 0.01 |
| 77 | 8 | 30 | 22 | 9.4 | 292.6 | 11.3 | 280.9 | 13.0 | 295.0 | 20.2 | 20.7 | 20.4 | 16.0 | 0.14 | 0.00 | 0.01 |
| 77 | 8 | 30 | 23 | 9.1 | 277.1 | 11.0 | 265.7 | 12.7 | 280.9 | 19.4 | 19.9 | 19.6 | 16.4 | 0.23 | 0.00 | 0.01 |
| 77 | 8 | 30 | 24 | 4.0 | 362.6 | 5.1 | 355.1 | 6.5 | 373.5 | 16.5 | 16.7 | 16.5 | 17.6 | 0.08 | 0.00 | 0.01 |
| 77 | 8 | 31 | 1 | 4.4 | 58.7 | 5.4 | 42.7 | 6.5 | 51.1 | 13.8 | 13.9 | 13.6 | 19.2 | -0.23 | 0.00 | 0.01 |
| 77 | 8 | 31 | 2 | 4.3 | 16.3 | 5.5 | 14.2 | 7.0 | 35.0 | 12.3 | 12.5 | 12.2 | 20.5 | -0.15 | 0.00 | 0.01 |
| 77 | 8 | 31 | 3 | 5.0 | 353.0 | 6.7 | 361.2 | 9.4 | 27.5 | 10.8 | 11.2 | 11.1 | 21.6 | 0.27 | 0.00 | 0.01 |
| 77 | 8 | 31 | 4 | 4.0 | 338.4 | 5.5 | 355.7 | 7.8 | 23.8 | 10.0 | 10.4 | 10.3 | 21.5 | 0.28 | 0.00 | 0.01 |
| 77 | 8 | 31 | 5 | 5.3 | 330.8 | 5.5 | 330.9 | 6.0 | 362.7 | 10.0 | 10.2 | 10.0 | 20.8 | -0.01 | 0.00 | 0.01 |
| 77 | 8 | 31 | 6 | 3.2 | 251.4 | 2.9 | 239.6 | 1.7 | 130.9 | 10.3 | 10.5 | 10.4 | 20.5 | 0.13 | 0.00 | 0.05 |
| 77 | 8 | 31 | 7 | 3.1 | 205.8 | 3.1 | 203.6 | 2.8 | 213.6 | 11.7 | 12.5 | 11.4 | 19.5 | -0.35 | 0.00 | 0.28 |
| 77 | 8 | 31 | 8 | 4.9 | 166.5 | 5.5 | 157.8 | 5.9 | 173.0 | 13.5 | 13.9 | 12.9 | 18.4 | -0.63 | 0.00 | 0.55 |
| 77 | 8 | 31 | 9 | 4.1 | 144.6 | 4.6 | 137.9 | 4.7 | 160.0 | 15.9 | 16.5 | 15.3 | 16.8 | -0.59 | 0.00 | 0.84 |
| 77 | 8 | 31 | 10 | 7.5 | 319.3 | 8.3 | 225.5 | 8.9 | 240.8 | 18.3 | 18.2 | 17.5 | 16.2 | -0.75 | 0.00 | 1.02 |
| 77 | 8 | 31 | 11 | 8.7 | 276.9 | 9.6 | 260.3 | 10.3 | 269.8 | 19.9 | 19.6 | 18.9 | 15.6 | -1.01 | 0.00 | 1.20 |
| 77 | 8 | 31 | 12 | 9.4 | 282.0 | 10.3 | 265.9 | 11.0 | 274.9 | 21.3 | 20.9 | 20.3 | 15.0 | -0.91 | 0.00 | 1.17 |
| 77 | 8 | 31 | 13 | 3.3 | 369.4 | 9.5 | 282.7 | 3.8 | 369.6 | 22.4 | 22.0 | 21.5 | 14.5 | -0.98 | 0.00 | 1.20 |
| 77 | 8 | 31 | 14 | 23.2 | 186.2 | 25.2 | 203.3 | 27.3 | 194.6 | 23.2 | 22.7 | 22.2 | 14.5 | -1.06 | 0.00 | 1.10 |
| 77 | 8 | 31 | 15 | 10.9 | 235.3 | 12.7 | 227.7 | 15.1 | 230.1 | 23.5 | 23.2 | 22.4 | 14.4 | -1.04 | 0.00 | 0.90 |
| 77 | 8 | 31 | 16 | 14.3 | 201.5 | 17.9 | 204.3 | 21.1 | 211.5 | 23.6 | 23.2 | 22.7 | 14.6 | -0.83 | 0.00 | 0.71 |
| 77 | 8 | 31 | 17 | 12.5 | 204.5 | 16.5 | 205.3 | 20.1 | 213.4 | 23.1 | 23.1 | 22.6 | 14.7 | -0.54 | 0.00 | 0.41 |
| 77 | 8 | 31 | 18 | 11.0 | 199.9 | 14.7 | 202.0 | 18.2 | 209.9 | 22.3 | 22.6 | 22.1 | 15.0 | -0.22 | 0.00 | 0.16 |
| 77 | 8 | 31 | 19 | 5.8 | 213.7 | 8.7 | 205.1 | 12.4 | 203.9 | 20.6 | 21.1 | 21.1 | 15.9 | 0.41 | 0.00 | 0.01 |
| 77 | 8 | 31 | 20 | 6.3 | 227.2 | 10.0 | 212.3 | 14.8 | 204.5 | 19.5 | 20.1 | 20.3 | 16.4 | 0.82 | 0.00 | 0.01 |
| 77 | 8 | 31 | 21 | 6.5 | 231.8 | 10.3 | 214.6 | 16.6 | 208.6 | 19.2 | 19.8 | 20.1 | 16.5 | 0.92 | 0.00 | 0.01 |

RIO BLANCO OIL SHALE PROJECT

| DATE | | | | 10M WIND | | 30M WIND | | 60M WIND | | TEMPERATURE | | | REL | DT3-1 | | SOLAR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | SPEED | DIRECTION | SPEED | DIRECTION | SPEED | DIRECTION | 10M | 30M | 60M | HUMID | | PRECIP | INSOL |
| YR | MN | DY | HR | (MPH) | (DEGS) | (MPH) | (DEGS) | (MPH) | (DEGS) | (C) | (C) | (C) | (%) | (C) | (INCH) | |
| 77 | 8 | 31 | 22 | 9.0 | 212.0 | 13.0 | 209.0 | 18.1 | 207.4 | 19.2 | 19.9 | 20.0 | 16.4 | 0.78 | 0.00 | 0.01 |
| 77 | 8 | 31 | 23 | 8.6 | 208.6 | 11.8 | 208.3 | 17.1 | 211.2 | 19.0 | 19.6 | 19.4 | 16.5 | 0.45 | 0.00 | 0.01 |
| 77 | 8 | 31 | 24 | 10.0 | 208.3 | 13.1 | 213.1 | 19.5 | 216.7 | 18.9 | 19.4 | 19.1 | 16.5 | 0.18 | 0.00 | 0.01 |
| 77 | 9 | 1 | 1 | 10.0 | 216.5 | 13.2 | 217.6 | 19.8 | 221.1 | 18.9 | 19.3 | 18.9 | 16.6 | 0.00 | 0.00 | 0.01 |
| 77 | 9 | 1 | 2 | 6.9 | 228.6 | 8.7 | 227.0 | 15.5 | 228.4 | 18.3 | 18.7 | 18.5 | 16.9 | 0.14 | 0.00 | 0.01 |
| 77 | 9 | 1 | 3 | 7.3 | 210.2 | 9.1 | 220.3 | 14.6 | 224.3 | 17.8 | 18.1 | 17.8 | 17.1 | 0.07 | 0.00 | 0.01 |
| 77 | 9 | 1 | 4 | 6.9 | 216.4 | 8.7 | 222.3 | 13.9 | 226.1 | 17.1 | 17.4 | 17.2 | 17.4 | 0.06 | 0.00 | 0.01 |
| 77 | 9 | 1 | 5 | 7.9 | 213.1 | 10.1 | 216.0 | 16.3 | 219.1 | 16.6 | 16.9 | 16.7 | 17.6 | 0.11 | 0.00 | 0.01 |
| 77 | 9 | 1 | 6 | 6.8 | 210.8 | 8.7 | 216.3 | 14.3 | 218.8 | 16.2 | 16.5 | 16.2 | 17.8 | 0.04 | 0.00 | 0.05 |
| 77 | 9 | 1 | 7 | 6.1 | 219.6 | 7.4 | 218.4 | 10.3 | 221.5 | 17.8 | 18.0 | 17.2 | 17.1 | -0.51 | 0.00 | 0.27 |
| 77 | 9 | 1 | 8 | 7.5 | 209.2 | 9.4 | 204.9 | 10.4 | 216.7 | 19.3 | 19.5 | 18.8 | 16.2 | -0.57 | 0.00 | 0.55 |
| 77 | 9 | 1 | 9 | 9.2 | 290.2 | 11.3 | 244.3 | 12.2 | 241.3 | 26.5 | 20.2 | 26.0 | 15.7 | -0.49 | 0.00 | 0.84 |
| 77 | 9 | 1 | 10 | 1.1 | 360.2 | 12.7 | 237.5 | 14.9 | 234.8 | 30.2 | 21.3 | 29.8 | 15.2 | -0.41 | 0.00 | 1.09 |
| 77 | 9 | 1 | 11 | 11.3 | 270.8 | 14.3 | 244.8 | 14.8 | 256.6 | 30.2 | 21.5 | 29.8 | 15.0 | -0.40 | 0.00 | 1.05 |
| 77 | 9 | 1 | 12 | 10.5 | 225.1 | 12.6 | 228.8 | 13.6 | 226.1 | 30.2 | 21.9 | 29.8 | 14.8 | -0.40 | 0.00 | 0.94 |
| 77 | 9 | 1 | 13 | 9.8 | 226.4 | 11.7 | 229.6 | 13.5 | 228.4 | 30.2 | 22.5 | 29.8 | 14.6 | -0.40 | 0.00 | 0.93 |
| 77 | 9 | 1 | 14 | 10.8 | 210.9 | 12.9 | 214.5 | 14.8 | 215.5 | 30.2 | 23.0 | 29.8 | 14.4 | -0.40 | 0.00 | 1.02 |
| 77 | 9 | 1 | 15 | 11.1 | 195.0 | 13.8 | 202.0 | 15.8 | 207.8 | 7.2 | 23.3 | 7.1 | 14.2 | -0.09 | 0.00 | 0.94 |
| 77 | 9 | 1 | 16 | 10.8 | 215.0 | 13.1 | 217.3 | 14.9 | 218.0 | 7.2 | 23.6 | 7.2 | 14.2 | 0.03 | 0.00 | 0.68 |
| 77 | 9 | 1 | 17 | 10.9 | 196.3 | 13.9 | 202.7 | 15.3 | 207.8 | 6.0 | 23.4 | 6.1 | 14.5 | 0.04 | 0.00 | 0.40 |
| 77 | 9 | 1 | 18 | 8.0 | 198.6 | 10.9 | 205.3 | 13.6 | 207.7 | 14.6 | 22.7 | 13.8 | 14.9 | -0.81 | 0.00 | 0.13 |
| 77 | 9 | 1 | 19 | 6.7 | 231.6 | 8.6 | 222.1 | 13.3 | 212.4 | 6.1 | 20.9 | 5.4 | 16.0 | -0.68 | 0.00 | 0.01 |
| 77 | 9 | 1 | 20 | 9.4 | 258.7 | 10.0 | 245.2 | 14.5 | 228.9 | 36.2 | 20.0 | 37.1 | 16.4 | 0.93 | 0.00 | 0.00 |
| 77 | 9 | 1 | 21 | 10.1 | 254.8 | 12.1 | 255.0 | 13.0 | 239.9 | 45.7 | 20.3 | 41.9 | 16.3 | -3.81 | 0.00 | 0.00 |
| 77 | 9 | 1 | 22 | 9.8 | 251.9 | 11.3 | 249.5 | 12.1 | 238.0 | 43.7 | 20.9 | 40.4 | 16.3 | -3.24 | 0.00 | 0.00 |
| 77 | 9 | 1 | 23 | 8.1 | 242.9 | 9.1 | 230.7 | 9.7 | 215.7 | 41.8 | 20.8 | 39.0 | 16.2 | -2.38 | 0.00 | 0.00 |
| 77 | 9 | 1 | 24 | 7.4 | 245.5 | 8.2 | 232.2 | 9.2 | 203.5 | 40.1 | 19.7 | 37.6 | 16.5 | -2.59 | 0.00 | 0.00 |
| 77 | 9 | 2 | 1 | 6.1 | 231.0 | 6.6 | 239.7 | 6.0 | 229.3 | 38.6 | 19.4 | 36.3 | 16.6 | -2.33 | 0.00 | 0.00 |
| 77 | 9 | 2 | 2 | 9.4 | 253.1 | 11.6 | 259.3 | 12.8 | 251.2 | 37.2 | 19.4 | 35.1 | 16.8 | -2.11 | 0.00 | 0.00 |
| 77 | 9 | 2 | 3 | 10.3 | 252.3 | 13.0 | 263.8 | 14.0 | 267.4 | 35.8 | 19.8 | 34.0 | 16.8 | -1.90 | 0.00 | 0.00 |
| 77 | 9 | 2 | 4 | 4.7 | 325.1 | 6.5 | 355.3 | 7.4 | 368.4 | 34.7 | 16.6 | 32.9 | 17.8 | -1.72 | 0.00 | 0.01 |
| 77 | 9 | 2 | 5 | 2.2 | 218.1 | 2.3 | 266.7 | 1.7 | 183.4 | 33.6 | 15.1 | 32.0 | 18.4 | -1.57 | 0.00 | 0.01 |
| 77 | 9 | 2 | 6 | 2.8 | 204.7 | 2.8 | 205.0 | 3.1 | 180.0 | 32.6 | 16.3 | 31.2 | 18.1 | -1.44 | 0.00 | 0.05 |
| 77 | 9 | 2 | 7 | 2.8 | 141.5 | 3.0 | 136.1 | 3.6 | 130.5 | -16.8 | 18.7 | 44.3 | 16.7 | 61.05 | 0.00 | 0.26 |
| 77 | 9 | 2 | 8 | 3.5 | 75.1 | 3.5 | 416.3 | 3.6 | 410.8 | -28.8 | 20.1 | 48.4 | 15.8 | 77.17 | 0.00 | 0.54 |
| 77 | 9 | 2 | 9 | 6.0 | 139.1 | 7.2 | 149.6 | -2.4 | 287.4 | -29.5 | 21.5 | 48.4 | 15.0 | 77.88 | 0.00 | 0.82 |
| 77 | 9 | 2 | 10 | 9.4 | 247.6 | 11.8 | 252.6 | 1.2 | 232.8 | 9.4 | 22.5 | 48.4 | 14.7 | 38.95 | 0.00 | 1.05 |
| 77 | 9 | 2 | 11 | 11.3 | 249.0 | 13.5 | 243.8 | 7.5 | 239.6 | 15.8 | 22.9 | 48.4 | 14.4 | 32.55 | 0.00 | 1.20 |
| 77 | 9 | 2 | 12 | 7.7 | 233.7 | 13.2 | 215.8 | 14.8 | 218.5 | 15.7 | 23.6 | 48.4 | 14.0 | 32.60 | 0.00 | 1.26 |
| 77 | 9 | 2 | 13 | 10.2 | 220.0 | 12.1 | 222.9 | 13.3 | 223.5 | 16.2 | 24.0 | 48.4 | 13.8 | 32.13 | 0.00 | 1.27 |
| 77 | 9 | 2 | 14 | 8.8 | 226.9 | 10.4 | 230.0 | 11.6 | 226.9 | 16.8 | 24.3 | 48.4 | 13.6 | 31.55 | 0.00 | 1.04 |
| 77 | 9 | 2 | 15 | 9.5 | 248.4 | 11.0 | 249.1 | 11.9 | 245.5 | 24.0 | 24.6 | 48.4 | 13.6 | 24.38 | 0.00 | 0.99 |
| 77 | 9 | 2 | 16 | 9.4 | 263.2 | 10.9 | 270.2 | 11.7 | 265.8 | 17.2 | 24.6 | 35.4 | 13.8 | 18.17 | 0.00 | 0.77 |

# APPENDIX C

# PRECIPITATION QUALITY

## SNOW PRECIPITATION

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CENTRAL LABORATORY, DENVER, COLORADO

WATER QUALITY ANALYSIS
LAB ID # 136038 RECORD # 2720

SAMPLE LOCATION: CORRAL GULCH NEAR RANGELY, CO.
STATION ID: 09306242 LAT.LONG.SEQ.: 395513 1082820 00
DATE OF COLLECTION: BEGIN--770303 END-- TIME--1100
STATE CODE: 08 COUNTY CODE: 103 PROJECT IDENTIFICATION: 460800300
DATA TYPE: 2 SOURCE: SURFACE-WATER GEOLOGIC UNIT:
COMMENTS: Snow Precipitation
KC

MAIL TO LAKEWOOD CO
SCHEDULES USED: 449 200 0 0
TOTAL PARAMETERS: 33 HCODE = 18
COST OF ANALYSIS $ 98.37 BILLING CODE: 08
SUBMIT CORRECTIONS TO THE DENVER CENTRAL LAB WITHIN 15 DAYS FROM 06/28/77. INDICATE THE CENTRAL LAB ID # AND RECORD # WITH RESPONSE.
WRD-QW FILE STORAGE WAS REQUESTED AND THE STATION HEADING INFORMATION IN THE WRD STATION HEADER FILE IS PASSWORD PROTECTED.

| | | | | | |
|---|---|---|---|---|---|
| ARSENIC DISSOLVED | UG/L | 1 | MAGNESIUM DISS | MG/L | 0.0 |
| BICARBONATE | MG/L | 0 | MERCURY DISSOLVED | UG/L | 0.0 |
| CADMIUM DISSOLVED | UG/L | 0 | NO2+NO3 AS N DISS | MG/L | 0.36 |
| CALCIUM DISS | MG/L | 0.1 | POTASSIUM DISS | MG/L | 0.0 |
| CHLORIDE DISS | MG/L | 0.1 | SELENIUM DISSOLVED | UG/L | 0 |
| CHROMIUM DISSOLVED | UG/L | 0 | SILICA DISSOLVED | MG/L | 0.2 |
| COPPER DISSOLVED | UG/L | 1 | SODIUM DISS | MG/L | 0.0 |
| FLUORIDE DISS | MG/L | 0.0 | SP. CONDUCTANCE LAB | | 6.4 |
| LEAD DISSOLVED | UG/L | 2 | SULFATE DISS | MG/L | 1.8 |

pH = 5.35 6-30-77

| CATIONS | (MG/L) | (MEQ/L) | ANIONS | (MG/L) | (MEQ/L) |
|---|---|---|---|---|---|
| CALCIUM DISS | 0.1 | 0.005 | BICARBONATE | 0 | 0.000 |
| MAGNESIUM DISS | 0.0 | 0.000 | CHLORIDE DISS | 0.1 | 0.003 |
| POTASSIUM DISS | 0.0 | 0.000 | FLUORIDE DISS | 0.0 | 0.000 |
| SODIUM DISS | 0.0 | 0.000 | SULFATE DISS | 1.8 | 0.038 |
| | | | NO2+NO3 AS N D | 0.36 | 0.026 |
| | TOTAL | 0.005 | | TOTAL | 0.066 |

PERCENT DIFFERENCE = -85.94

SECTION II

TERRESTRIAL STUDIES

APPENDICES

APPENDIX D

RANGE PRODUCTION DATA

AUGUST 1977

LIST OF ABBREVIATIONS FOR THE PLANT
SPECIES SAMPLED IN THE RANGE STUDIES

| Abbreviations | Scientific Name |
|---|---|
| ANT sp | _Antennaria_ sp |
| AST sp | _Astragalus_ sp |
| CHA sp | _Chaenactis_ sp |
| CHE sp | _Chenopodium_ sp |
| COL LIN | _Collomia linearis_ |
| CRY sp | _Cryptantha sericea_ |
| ERI sp | _Eriogonum_ sp |
| ERI LON | _E. lonahophyllum_ |
| ERI UMB | _E. umbellatum_ |
| ERY ASP | _Erysimum asperum_ |
| HAP NUT | _Haplopappus nuttallii_ |
| HED BOR | _Hedysarum boreale_ |
| HYM ACA | _Hymenoxys acaulis_ |
| IPO AGG | _Ipomopsis aggregata_ |
| LIN LEW | _Linum lewisii_ |
| LIT RUD | _Lithospermum ruderale_ |
| PEN sp | _Penstemon_ sp |
| PHL sp | _Phlox_ sp |
| PHL HOO | _Phlox hoodii_ |
| PHY FLO | _Physaria floribunda_ |
| SEN MUL | _Senecio multilobatus_ |
| SIS LIN | _Sisymbrium linifolium_ |
| SPH COC | _Sphaeralcea coccinea_ |
| TAR OFF | _Taraxacum officinale_ |
| UNK Legume | Unknown legume |

# RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT 6692

DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB

PAGE NO. 1 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 1A | Grasses | 15.5 | 30.3 | 19.2 |
| | LIN LEW | 1.5 | 1.25 | 0.5 |
| | Other Forbs | .3 | .14 | Lost |
| 1B | Other Forbs | 1.0 | | |
| | Grasses | 7.0 | | |
| | ERI sp | 1.0 | | |
| 1C | Other Forbs | .5 | | |
| | Grasses | 6.0 | | |
| | HED BOR | 4.0 | | |
| | COL LIN | 1.0 | | |
| | ERI UMB | .5 | | |
| 1D | Grasses | 6.5 | | |
| | AST sp | 0.3 | | |
| | LIN LEW | 0.1 | | |
| | ERY ASP | 0.5 | | |
| 1E | Grasses | 5.0 | | |
| | ERI UMB | 0.2 | | |
| 1F | LIN LEW | 1.0 | | |
| | ERI UMB | 4.5 | | |
| | AST sp | 1.0 | | |
| | COL LIN | 1.0 | | |
| | HAP NUT | 1.0 | | |
| | CRY sp | 0.5 | | |
| | UNK Legume | 1.5 | | |
| | Grasses | 5.5 | | |
| 1G | COL LIN | 1.0 | | |
| | ERI UMB | 1.5 | | |

<u>RANGE PRODUCTIVITY FIELD & LAB DATA</u>

PROJECT RBOSP

DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB

PAGE NO. 2 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 1G(Con't) | AST sp | 1.0 | | |
| | UNK Legume | 2.0 | | |
| | Grasses | 4.5 | | |
| | Other Forbs | 0.5 | | |
| 1H | AST sp | 1.0 | | |
| | CRY sp | 0.2 | | |
| | COL LIN | 1.0 | | |
| | PHY FLO | 0.2 | | |
| | Grasses | 5.0 | | |
| | UNK Legume | 4.0 | | |
| 1I | UNK Legume | 0.2 | | |
| | ERI sp | 1.0 | | |
| | Grasses | 3.5 | | |
| 1J | COL LIN | 13.0 | 23.0 | 9.9 |
| | LIN LEW | 1.0 | 2.0 | 0.7 |
| | AST sp | 0.2 | 0.3 | 0.2 |
| | UNK Legume | 1.5 | 2.0 | 1.2 |
| | Grasses | 13.0 | 17.2 | 11.2 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

VEGETATION TYPE MB

OBSERVER CVB

DATE August 12, 1977

PAGE NO. 1 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 2-A | COL LIN | 10.0 | 5.0 | 2.5 |
| | ERI UMB | 4.0 | 5.2 | 3.4 |
| | UNK Legume | 2.0 | 1.0 | 1.3 |
| | Grasses | 26.0 | 27.5 | 25.6 |
| | HED BOR | 1.0 | .7 | 0.4 |
| 2-B | ERI UMB | 0.5 | | |
| | COL LIN | 0.2 | | |
| | AST sp | 0.3 | | |
| | TAR OFF | 0.2 | | |
| | Grasses | 8.5 | | |
| | LIN LEW | 0.5 | | |
| | ERI sp | 8.5 | | |
| 2-C | COL LIN | 3.0 | | |
| | HED BOR | 4.5 | | |
| | ERI UMB | 0.5 | | |
| | UNK Legume | 1.5 | | |
| | Grasses | 4.0 | | |
| 2-D | COL LIN | 0.5 | | |
| | SPH COC | 0.5 | | |
| | Grasses | 7.0 | | |
| 2-E | COL LIN | 8.5 | | |
| | Grasses | 7.0 | | |
| | Other Forbs | 0.5 | | |
| 2-F | COL LIN | 3.5 | | |
| | UNK Legume | 4.0 | | |
| | Grasses | 3.5 | | |
| 2-G | PHL sp | 5.0 | | |

RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB

PAGE NO. 2 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 2-E | COL LIN | 8.5 | | |
| | Grasses | 7.0 | | |
| | Other Forbs | 0.5 | | |
| 2-F | COL LIN | 3.5 | | |
| | UNK Legume | 4.0 | | |
| | Grasses | 3.5 | | |
| 2-G | PHL sp | 5.0 | | |
| | HED BOR | 1.0 | | |
| | AST. sp | 0.5 | | |
| | Grasses | 5.0 | | |
| 2-H | COL LIN | 4.5 | | |
| | LIN LEW | 0.5 | | |
| | AST sp | 0.5 | | |
| | ERI UMB | 1.0 | | |
| | UNK Legume | 1.0 | | |
| | Grasses | 5.5 | | |
| 2-I | COL LIN | 1.0 | | |
| | HYM ACA | 1.5 | | |
| | LIN LEW | 0.5 | | |
| | PHY FLO | 2.0 | | |
| | COL LIN | 0.2 | | |
| | Grasses | 7.0 | | |
| 2-J | COL LIN | 15.0 | 20.0 | 10.0 |
| | LIN LEW | 1.5 | 1.5 | 0.8 |
| | HYM ACA | 8.0 | 33.5 | 17.3 |
| | Grasses | 0.5 | .2 | 0.2 |
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## RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB PAGE NO. 1 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 3-A | Grasses | 11.0 | 16.4 | 12.2 |
| | COL LIN | 9.0 | 10.2 | 5.5 |
| | UNK Legume | 4.0 | 6.6 | 4.9 |
| | CHA sp | 0.5 | .3 | 0.1 |
| | ERI UMB | 0.5 | .5 | 0.3 |
| | HED BOR | 1.0 | 1.0 | 0.4 |
| 3-B | COL LIN | 1.0 | | |
| | Grasses | 5.0 | | |
| | HED BOR | 0.5 | | |
| 3-C | PHL sp | 8.0 | | |
| | COL LIN | 4.0 | | |
| | ERI UMB | 1.5 | | |
| | Other Forbs | 2.5 | | |
| | Grasses | 9.0 | | |
| 3-D | Grasses | 3.5 | | |
| | COL LIN | 2.0 | | |
| | PHL sp | 8.0 | | |
| | HED BOR | 1.0 | | |
| 3-E | COL LIN | 10.0 | | |
| | Other Forbs | 1.0 | | |
| | Grasses | 13.0 | | |
| 3-F | Grasses | 10.0 | | |
| | COL LIN | 8.0 | | |
| | PEN sp | 0.5 | | |
| | IPO AGG | 0.5 | | |
| | PHL sp | 3.0 | | |
| | HED BOR | 2.5 | | |

RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB

PAGE NO. 2 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 3-F(Con't) | LIT RUD | 6.0 | | |
| | ERI UMB | 0.5 | | |
| 3-G | COL LIN | 4.0 | | |
| | ERI UMB | 5.5 | | |
| | Grasses | 7.5 | | |
| | Other Forbs | 5.0 | | |
| 3-H | COL LIN | 1.5 | | |
| | ERI UMB | 1.5 | | |
| | Other Forbs | 1.0 | | |
| | UNK Legume | 1.0 | | |
| | Grasses | 13.0 | | |
| | IPO AGG | 0.5 | | |
| 3-I | COL LIN | 6.0 | | |
| | LIN LEW | 0.5 | | |
| | Grasses | 12.0 | | |
| 3-J | UNK Legume | 4.5 | 9.0 | 6.5 |
| | HYM ACA | 1.0 | 0.2 | 0.05 |
| | COL LIN | 1.0 | 0.5 | 0.25 |
| | ERI sp | 1.5 | 2.3 | 1.3 |
| | Grasses | 20.0 | 24.3 | 18.1 |
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# RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB PAGE NO. 1 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 4-A | HAP NUT | 3.0 | 1.5 | 1.0 |
| | UNK Legume | 4.5 | 9.8 | 6.6 |
| | PEN sp | 0.5 | 0.1 | 0.1 |
| | ERI UMB | 1.0 | 1.0 | 0.6 |
| | Grasses | 13.0 | 17.5 | 11.75 |
| | PHL sp | 6.0 | 9.2 | 8.0 |
| | HYM ACA | 1.0 | 2.0 | 1.0 |
| | Other Forbs | .8 | 2.0 | 1.5 |
| 4-B | HAP NUT | 5.0 | | |
| | ERI sp | 1.0 | | |
| | SEN MUL | 1.0 | | |
| | PHL sp | 8.0 | | |
| | PEN sp | 0.5 | | |
| | UNK Legume | 0.5 | | |
| | PHY FLO | 0.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 5.0 | | |
| 4-C | PHL sp | 12.0 | | |
| | ERI UMB | 1.5 | | |
| | UNK Legume | 1.0 | | |
| | HYM ACA | 1.0 | | |
| | AST sp | 0.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 6.5 | | |
| 4-D | PHL sp | 3.0 | | |
| | Other Forbs | 1.0 | | |
| | Grasses | 8.0 | | |

RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB

PAGE NO. 2 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 4-D (Con't) | UNK Legume | 0.5 | | |
| 4-E | CHE sp. | 25 | | |
| | SPH COC | 1.0 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 1.0 | | |
| 4-F | SPH COC | 2.0 | | |
| | HYM ACA | 3.0 | | |
| | Grasses | 5.5 | | |
| 4-G | HYM ACA | 7.0 | | |
| | Grasses | 8.0 | | |
| 4-H | UNK Legume | 4.0 | | |
| | HYM ACA | 3.0 | | |
| | Other Forbs | 1.0 | | |
| | Grasses | 14.0 | | |
| 4-I | UNK Legume | 1.0 | | |
| | Other Forbs | 1.0 | | |
| | Grasses | 13.0 | | |
| 4-J | Grasses | 40.0 | 55.4 | 43.0 |
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# RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP DATE August 14, 1977

VEGETATION TYPE PJ

OBSERVER CVB PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 5-A | Grasses | 2.5 | 3.2 | 2.1 |
| 5-B | Grasses | 3.0 | | |
| | Other Forbs | 0.2 | | |
| 5-C | Grasses | 2.5 | | |
| 5-D | PEN sp | 0.5 | | |
| | Grasses | 1.5 | | |
| 5-E | Grasses | 4.5 | | |
| 5-F | ANT sp | 0.2 | | |
| | Grasses | 2.0 | | |
| 5-G | PHL HOO | 4.0 | | |
| | SEN MUL | 1.5 | | |
| | Grasses | 1.0 | | |
| 5-H | PEN sp | 0.5 | | |
| | CRY sp | 0.5 | | |
| | PHL sp | 1.0 | | |
| | Grasses | 3.0 | | |
| 5-I | CRY sp | 0.5 | | |
| | Grasses | 1.5 | | |
| 5-J | CRY sp | 1.0 | 0.8 | 0.6 |
| | Grasses | 3.5 | 4.8 | 3.7 |
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## RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 12, 1977

VEGETATION TYPE MB

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 6-A | HAP NUT | 9.5 | 13.1 | 6.6 |
| | UNK Legume | 0.5 | 0.5 | 0.4 |
| | Other Forbs | 1.5 | 1.2 | 0.65 |
| | Grasses | 8.0 | 3.5 | 2.6 |
| 6-B | HAP NUT | 5.0 | | |
| | PHY FLO | 0.5 | | |
| | Grasses | 4.0 | | |
| 6-C | ERI sp | 8.0 | | |
| 6-D | HAP NUT | 4.0 | | |
| 6-E | - | | | |
| 6-F | HAP NUT | 9.0 | | |
| 6-G | HAP NUT | 2.5 | | |
| 6-H | HAP NUT | 7.5 | | |
| | Other Forbs | 1.0 | | |
| 6-I | ERI sp | 4.0 | | |
| 6-J | HAP NUT | 13.0 | 13.5 | 6.4 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT 6692

VEGETATION TYPE PJ

OBSERVER CVB

DATE August 13, 1977

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 7-A | Grasses | 5.0 | 3.3 | 3.25 |
| 7-B | Grasses | 1.5 | | |
| 7-C | Grasses | 2.0 | | |
| 7-D | Grasses | 5.0 | | |
| 7-E | Grasses | 13.0 | | |
| 7-F | - | | | |
| 7-G | AST sp | 1.0 | | |
| | Grasses | 3.0 | | |
| | PHY FLO | 0.5 | | |
| 7-H | Grasses | 7.0 | | |
| 7-I | Grasses | 5.5 | | |
| 7-J | Grasses | 17.0 | 15.0 | 10.6 |
| | IPO AGG | 0.5 | 0.3 | 0.1 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP | DATE August 13, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB | PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 8-A | SPH COC | 0.5 | 0.7 | 0.5 |
| | Grasses | 23.0 | 12.8 | 9.4 |
| 8-B | Grasses | 6.0 | | |
| 8-C | Grasses | 8.5 | | |
| 8-D | SPH COC | 0.5 | | |
| | PHL HOO | 4.5 | | |
| | Grasses | 3.5 | | |
| 8-E | Grasses | 6.5 | | |
| 8-G | SPH COC | 5.0 | | |
| | ERI UMB | 1.5 | | |
| | Grasses | 6.5 | | |
| | Other Forbs | 0.5 | | |
| 8-H | ANT sp | 1.5 | | |
| | SPH COC | 2.0 | | |
| | PHL HOO | 3.0 | | |
| | Grasses | 1.5 | | |
| 8-F | SPH COC | 2.5 | | |
| | Grasses | 4.0 | | |
| 8-I | SPH COC | 1.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 5.0 | | |
| 8-J | SPH COC | 2.5 | 2.1 | 1.0 |
| | ERI UMB | 1.5 | 5.1 | 4.25 |
| | Grasses | 10.0 | 13.7 | 10.2 |
| | Other Forbs | 0.5 | 2.2 | 1.1 |
| | ANT sp | 0.5 | 0.3 | Lost |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 13, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 9-A | SPH COC | 1.0 | 0.3 | 0.2 |
| | IPO AGG | 0.5 | 0.5 | 0.3 |
| | Other Forbs | 1.0 | 1.4 | 0.8 |
| | Grasses | 7.0 | 11.5 | 8.2 |
| 9-B | SPH COC | 0.5 | | |
| | Grasses | 5.0 | | |
| 9-C | Grasses | 3.0 | | |
| 9-D | PHL HOO | 6.0 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 10.5 | | |
| 9-E | Other Forbs | 1.0 | | |
| | Grasses | 5.5 | | |
| 9-F | CRY sp | 0.5 | | |
| | SEN MUL | 1.0 | | |
| | Grasses | 3.0 | | |
| 9-G | Grasses | 2.0 | | |
| 9-H | PHL HOO | 3.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 3.5 | | |
| 9-I | Other Forbs | 2.0 | | |
| | Grasses | 8.5 | | |
| 9-J | Other Forbs | 1.5 | 5.9 | 3.7 |
| | Grasses | 14.5 | 16.5 | 11.6 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT 6692 DATE August 13, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 10-A | Other Forbs | 1.0 | 1.3 | 0.95 |
| | UNK Legume | 0.5 | 0.8 | 0.6 |
| | PHL sp | 2.0 | 1.7 | 1.25 |
| | Grasses | 3.5 | 3.5 | 2.5 |
| 10-B | PHL HOO | 3.0 | | |
| | Other Forbs | 0.5 | | |
| 10-C | PHL HOO | 1.0 | | |
| | Other Forbs | 3.0 | | |
| 10-D | PHL HOO | 2.0 | | |
| | Other Forbs | 1.0 | | |
| | SPH COC | 0.5 | | |
| | Grasses | 3.0 | | |
| 10-E | PHL HOO | 3.0 | | |
| | Other Forbs | 0.5 | | |
| 10F | Grasses | 4.0 | | |
| 10-G | Grasses | 3.0 | | |
| | PHL HOO | 1.5 | | |
| 10-H | PHL HOO | 1 | | |
| 10-I | SPH COC | 1.5 | | |
| | Grasses | 1.0 | | |
| 10-J | Grasses | 3.0 | 3.0 | 2.25 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

VEGETATION TYPE PJ

OBSERVER CVB

DATE August 14, 1977

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| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 11-A | Grasses | 4 | 5.5 | 4.0 |
| 11-B | Grasses | 1 | | |
| 11-C | Grasses | 2.5 | | |
| 11-D | ANT sp. | 0.2 | | |
| | Grasses | 3.0 | | |
| 11-E | CRY sp. | 0.2 | | |
| | Grasses | 2.0 | | |
| 11-F | SEN MUL | 0.5 | | |
| | Grasses | 3.5 | | |
| 11-G | Grasses | 0.5 | | |
| | Other Forbs | 0.5 | | |
| 11-H | Grasses | 2.0 | | |
| | PHL sp | 0.2 | | |
| 11-I | HAP NUT | 1.5 | | |
| | Grasses | 3.0 | | |
| 11-J | Grasses | 6.0 | 5.0 | 3.6 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 14, 1977

VEGETATION TYPE PJ

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 12-A | PHL HOO | 1.5 | 0.8 | 0.7 |
| | Grasses | 2.5 | 3.1 | 2.2 |
| | CRY sp | 0.5 | 0.1 | 0.05 |
| 12-B | Grasses | 5.0 | | |
| 12-C | Grasses | 2.5 | | |
| 12-D | CRY sp | 0.5 | | |
| | Grasses | 1.0 | | |
| 12-E | PHL sp | 0.5 | | |
| | CRY sp | 0.1 | | |
| | Grasses | 1.0 | | |
| 12-F | Grasses | 3.0 | | |
| 12-G | Grasses | 1.5 | | |
| 12-H | Grasses | 2.0 | | |
| 12-I | Grasses | 3.0 | | |
| | Other Forbs | 0.5 | | |
| 12-J | PHL HOO | 1.2 | 1.5 | 1.8 |
| | PHL sp | 0.5 | 0.2 | 0.1 |
| | Grasses | 7.0 | 5.8 | 4.05 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 14, 1977

VEGETATION TYPE Bot. Sage

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 13-A | SIS LIN | 3.5 | 2.6 | 0.7 |
| | CHE sp | 0.2 | 0.1 | 0.05 |
| 13-B | CHE sp | 4.5 | | |
| | SIS LIN | 6.0 | | |
| 13-C | - | | | |
| 13-D | Grasses | 2.0 | | |
| 13-E | - | | | |
| 13-F | - | | | |
| 13-G | - | | | |
| 13-H | - | | | |
| 13-I | Grasses | 1.5 | | |
| 13-J | - | | | |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 14, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 14-A | Grasses | 19.0 | 14.5 | 9.6 |
| 14-B | - | | | |
| 14-C | Grasses | 5.0 | | |
| 14-D | Grasses | 7.0 | | |
| 14-E | Grasses | 12.0 | | |
| 14-F | Grasses | 8.0 | | |
| 14-G | Grasses | 5.0 | | |
| 14-H | Grasses | 3.5 | | |
| 14-I | Grasses | 5.5 | | |
| 14-J | Grasses | 8.0 | 2.5 | 1.95 |

## RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT 6692

DATE August 14, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 15-A | Grasses | 22.0 | 33.5 | 18.5 |
| 15-B | Grasses | 9.0 | | |
| 15-C | Grasses | 11.0 | | |
| 15-D | Grasses | 6.0 | | |
| 15-E | Grasses | 3.0 | | |
| 15-F | Grasses | 6.5 | | |
| 15-G | Grasses | 6.0 | | |
| 15-H | Grasses | 5.0 | | |
| | Other Forbs | 1.0 | | |
| 15-I | Grasses | 8.0 | | |
| | CHE sp | 12.0 | | |
| | SEN MUL | 0.5 | | |
| | CRY sp | 2.0 | | |
| 15-J | Grasses | 24.0 | 23.7 | 13.6 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP  DATE August 16, 1977

VEGETATION TYPE PJ

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| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 16-A | Grasses | 8.0 | 12.5 | 6.0 |
| 16-B | Grasses | 2.0 | | |
| | PHL HOO | 1.0 | | |
| | Other Forbs | 0.5 | | |
| 16-C | Grasses | 5.0 | | |
| 16-D | PHL HOO | 1.5 | | |
| | HAP NUT | 0.5 | | |
| | PHL sp | 0.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 5.0 | | |
| 16-E | UNK Legume | 0.5 | | |
| | PHL HOO | 1.0 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 8.5 | | |
| 16-F | HAP NUT | 0.5 | 0.6 | 0.3 |
| | CRY sp | 0.2 | 0.4 | 0.2 |
| | PHL HOO | 0.2 | 0.6 | 0.3 |
| | Grasses | 13.5 | 10.7 | 8.55 |
| 16-G | UNK Legume | 1.5 | | |
| | HAP NUT | 2.0 | | |
| | PHL HOO | 1.0 | | |
| | Other Forbs | 2.0 | | |
| | Grasses | 3.0 | | |
| 16-H | Other Forbs | 0.5 | | |
| | UNK Legume | 0.5 | | |
| | Grasses | 8.5 | | |
| 16-I | - | | | |

RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 16, 1977

VEGETATION TYPE PJ

OBSERVER CVB

PAGE NO. 2 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 16-J | Grasses | 1.5 | | |
| | CRY.sp. | 0.5 | | |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 16, 1977

VEGETATION TYPE PJ

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 17-A | Grasses | 3.5 | 4.0 | 3.8 |
| 17-B | PHL HOO | 0.5 | | |
| | Grasses | 2.5 | | |
| | Other Forbs | 0.5 | | |
| 17-C | Grasses | 0.2 | | |
| | HAP NUT | 4.0 | | |
| 17-D | PHL HOO | 1.0 | | |
| | Grasses | 3.5 | | |
| 17-E | PHL HOO | 4.0 | | |
| | HAP NUT | 1.0 | | |
| | Grasses | 8.0 | | |
| 17-F | Grasses | 4.5 | | |
| | HAP NUT | 5.0 | | |
| 17-G | Grasses | 0.5 | | |
| 17-H | Grasses | 4.0 | | |
| 17-I | Grasses | 4.5 | | |
| 17-J | PHL HOO | 4.0 | 1.5 | 1.4 |
| | CRY sp | 0.5 | 0.8 | 0.8 |
| | HAP NUT | 0.7 | 0.5 | 0.35 |
| | Grasses | 5.5 | 5.7 | 3.7 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP
DATE August 16, 1977
VEGETATION TYPE PJ
OBSERVER CVB
PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 18-A | Grasses | 5.5 | 4.3 | 3.7 |
| | PHL sp | 0.5 | 0.2 | 0.1 |
| | PHL HOO | 0.5 | 0.3 | 1.2 |
| 18-B | Grasses | 5.0 | | |
| 18-C | Grasses | 4.5 | | |
| 18-D | PHL HOO | 1.5 | | |
| | Grasses | 2.0 | | |
| 18-E | PHL HOO | 2.0 | | |
| | Grasses | 3.5 | | |
| 18-F | Grasses | 2.5 | | |
| 18-G | PHL HOO | 4.5 | | |
| | CRY sp | 0.5 | | |
| | Grasses | 2.0 | | |
| 18-H | PHL HOO | 3.0 | | |
| | Grasses | 4.5 | | |
| 18-I | PHL HOO | 0.5 | | |
| | Grasses | 6.5 | | |
| 18-J | PHL HOO | 1.5 | 1.6 | 0.2 |
| | Grasses | 7.0 | 7.9 | 6.3 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 16, 1977

VEGETATION TYPE PJ

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 19-A | PHL HOO | 6.0 | 7.0 | 6.0 |
| | Grasses | 3.0 | 3.5 | 2.45 |
| | Other Forbs | 0.5 | 1.0 | 1.3 |
| 19-B | PHL HOO | 0.5 | | |
| | Grasses | 2.0 | | |
| 19-C | Grasses | 1.0 | | |
| | PHL HOO | 0.5 | | |
| 19-D | SPH COC | 0.5 | | |
| | Grasses | 6.0 | | |
| 19-E | PHL HOO | 2.0 | | |
| | Grasses | 4.0 | | |
| 19-F | PHL HOO | | | |
| 19-G | Grasses | 1.0 | | |
| 19-H | Grasses | 1.0 | | |
| 19-I | Grasses | 5.5 | | |
| 19-J | Grasses | 11.0 | 11.0 | 9.1 |
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## RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP    DATE August 16, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB    PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 20-A | PHL HOO | 4.0 | 12.0 | 8.5 |
| | SPH COC | 8.0 | 9.8 | 6.5 |
| | Grasses | 5.5 | 11.5 | 8.3 |
| 20-B | PHL HOO | 7.0 | | |
| | Grasses | 2.0 | | |
| 20-C | PHL HOO | 2.0 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 4.0 | | |
| 20-D | Grasses | 1.0 | | |
| 20-E | Grasses | 3.0 | | |
| 20-F | PHL HOO | 1.0 | | |
| | SPH COC | 0.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 1.5 | | |
| 20-G | Grasses | 4.0 | | |
| | Other Forbs | 0.5 | | |
| 20-H | PHL HOO | 3.0 | | |
| | | | | |
| | Grasses | 3.5 | | |
| 20-I | PHL HOO | 2.0 | | |
| | Grasses | 4.0 | | |
| 20-J | PEN sp | 0.5 | 0.5 | 0.3 |
| | Grasses | 6.5 | 6.0 | 5.3 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 16, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 21-A | PHL HOO | 2.0 | 2.2 | 1.5 |
| | SPH COC | 1.0 | 0.7 | 0.3 |
| | Grasses | 1.5 | 0.8 | 0.5 |
| 21-B | SPH COC | 1.0 | | |
| | Grasses | 1.0 | | |
| 21-C | PHL HOO | 1.0 | | |
| | HAP NUT | 1.0 | | |
| | UNK Legume | 0.2 | | |
| | Grasses | 5.0 | | |
| 21-D | SPH COC | 1.5 | | |
| | HYM ACA | 1.0 | | |
| | Grasses | 1.5 | | |
| 21-E | Grasses | 4.0 | | |
| | SEN MUL | 0.2 | | |
| | CRY sp. | 0.2 | | |
| | IPO AGG | 0.1 | | |
| | PHL HOO | 1.0 | | |
| 21-F | CRY sp | 2.5 | | |
| | PHL HOO | 1.0 | | |
| | Grasses | 6.0 | | |
| 21-G | Grasses | 8.0 | | |
| 21-H | CRY sp | 0.5 | | |
| | Grasses | 4.0 | | |
| 21-I | Grasses | 11.0 | | |
| 21-J | Other Forbs | 0.5 | 0.4 | 0.25 |
| | Grasses | 25.0 | 36.8 | 25.45 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 16, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 22-A | Grasses | 20.0 | 25.1 | 18.35 |
| 22-B | Grasses | 5.0 | | |
| | Other Forbs | 0.5 | | |
| 22-C | Grasses | 6.0 | | |
| 22-D | Grasses | 8.0 | | |
| 22-E | Grasses | 4.0 | | |
| 22-F | Grasses | 9.0 | | |
| 22-G | SPH COC | 0.5 | | |
| | Grasses | 4.0 | | |
| 22-H | Grasses | 6.0 | | |
| 22-I | PEN sp | 2.0 | | |
| | Grasses | 12.0 | | |
| | Other Forbs | 0.5 | | |
| 22-J | COL.LIN | 2.5 | 2.1 | 1.5 |
| | SPH COC | 1.5 | 0.9 | 0.55 |
| | Grasses | 8.5 | 17.5 | 12.8 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 15, 1977

VEGETATION TYPE PJ

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 23-A | Other Forbs | 1.0 | 0.8 | 0.25 |
| | Grasses | 11.0 | 18.1 | 15.5 |
| 23-B | Grasses | 0.5 | | |
| 23-C | Grasses | 5.0 | | |
| 23-D | Grasses | 2.5 | | |
| | Other Forbs | 0.5 | | |
| 23-E | Other Forbs | 0.5 | | |
| | PHL HOO | 1.5 | | |
| | ANT sp | 0.5 | | |
| 23-F | Grasses | 0.5 | | |
| 23-G | - | | | |
| 23-H | Other Forbs | 1.5 | | |
| | Grasses | 2.0 | | |
| 23-I | Grasses | 5.0 | | |
| 23-J | PHY FLO | 0.5 | 0.2 | 0.1 |
| | CRY sp | 1.0 | 0.6 | 0.25 |
| | Grasses | 12.0 | 9.5 | 6.6 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 15, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 24-A | SPH COC | 0.5 | 0.6 | 0.25 |
| | PHL HOO | 1.0 | 1.7 | 1.45 |
| | Grasses | 14.0 | 32.5 | 25.55 |
| 24-B | Grasses | 5.0 | | |
| | PHL HOO | 0.5 | | |
| 24-C | PHL HOO | 1.0 | | |
| | SPH COC | 0.5 | | |
| | HAP NUT | 1.5 | | |
| | Other Forbs | 1.0 | | |
| | Grasses | 7.0 | | |
| 24-D | PHL HOO | 6.0 | | |
| | SPH COC | 0.5 | | |
| | PEN sp | 1.0 | | |
| | Grasses | 4.5 | | |
| 24-E | PHL HOO | 4.0 | | |
| | PEN sp | 0.5 | | |
| | Grasses | 2.5 | | |
| 24-F | PHL HOO | 10.0 | | |
| | PEN sp | 1.0 | | |
| | Grasses | 5.0 | | |
| 24-G | PHY FLO | 0.5 | | |
| | PHL HOO | 0.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 0.3 | | |
| 24-H | PHL HOO | 1.0 | | |
| | PHY FLO | 0.3 | | |
| | Grasses | 7.0 | | |

RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP  DATE August 15, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB  PAGE NO. 2 of 2

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 24-I | PHL HOO | 1.0 | | |
| | PEN sp | 0.5 | | |
| | Grasses | 5.0 | | |
| 24-J | PEN sp | 1.5 | 1.2 | 0.55 |
| | HAP NUT | 3.5 | 3.0 | 1.3 |
| | Grasses | 8.0 | 13.7 | 9.9 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 15, 1977

VEGETATION TYPE PJ

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 25-A | PHL HOO | 1.5 | 1.2 | 1.05 |
| | Grasses | 12.0 | 17.0 | 12.7 |
| 25-B | Grasses | 15.0 | | |
| | SPH COC | 0.5 | | |
| 25-C | Grasses | 13.0 | | |
| 25-D | Grasses | 3.0 | | |
| 25-E | Grasses | 3.0 | | |
| 25-F | ANT sp | 0.5 | | |
| | Grasses | 10.0 | | |
| 25-G | Other Forbs | 0.5 | | |
| | Grasses | 3.0 | | |
| 25-H | Grasses | 11.0 | | |
| | Other Forbs | 1.0 | | |
| 25-I | ANT sp | 1.0 | | |
| | Grasses | 3.5 | | |
| 25-J | PHL HOO | 1.5 | 1.4 | 1.0 |
| | Other Forbs | 0.5 | 0.1 | 0.05 |
| | Grasses | 17.0 | 16.6 | 12.8 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 15, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 26-A | SPH COC | 1.5 | 1.9 | 1.05 |
| | PHL HOO | 1.5 | 1.1 | 0.85 |
| | Grasses | 7.0 | 11.5 | 9.4 |
| 26-B | Grasses | 9.0 | | |
| | PHL HOO | 0.5 | | |
| | SPH COC | 0.5 | | |
| | Other Forbs | 0.5 | | |
| 26-C | Grasses | 9.0 | | |
| 26-D | SPH COC | 0.5 | | |
| | Grasses | 10.0 | | |
| 26-E | PEN sp | 0.5 | | |
| | SPH COC | 1.5 | | |
| | PHL HOO | 1.5 | | |
| | Grasses | 9.0 | | |
| 26-F | CHE sp | 0.5 | | |
| | ERI LON | 6.0 | | |
| | PEN sp | 1.0 | | |
| | Grasses | 10.0 | | |
| 26-G | SPH COC | 1.0 | | |
| | Grasses | 7.0 | | |
| 26-H | SPH COC | 1.5 | | |
| | PHL sp | 0.5 | | |
| | Grasses | 10.0 | | |
| 26-I | Grasses | 9.0 | | |
| 26-J | SPH COC | 1.0 | 0.4 | 0.6 |
| | Grasses | 20.0 | 16.5 | 14.2 |
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# RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP
VEGETATION TYPE Sagebrush
OBSERVER CVB

DATE August 15, 1977
PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 27-A | SPH COC | 0.5 | 2.0 | 0.7 |
| | Grasses | 20.0 | 26.0 | 23.3 |
| | Other forbs | 1.0 | 0.2 | 0.1 |
| 27-B | PHL HOO | 3.0 | | |
| | Grasses | 7.0 | | |
| 27-C | SPH COC | 0.5 | | |
| | Grasses | 4.0 | | |
| 27-D | Grasses | 12.0 | | |
| 27-E | Grasses | 12.0 | | |
| 27-F | SPH COC | 0.5 | | |
| | PHL sp | 3.0 | | |
| | Grasses | 7.5 | | |
| 27-G | SPH COC | 0.5 | | |
| | Other Forbs | 0.5 | | |
| | Grasses | 6.0 | | |
| 27-H | Grasses | 11.0 | | |
| 27-I | SPH COC | 0.5 | | |
| | Grasses | 6.5 | | |
| 27-J | PHL HOO | 3.5 | 6.3 | 5.7 |
| | Grasses | 12.0 | 12.0 | 9.5 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 15, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 28-A | Grasses | 15.0 | 19.3 | 12.15 |
| 28-B | Grasses | 1.5 | | |
| | CHE sp | 0.5 | | |
| 28-C | Grasses | 1.0 | | |
| 28-D | Grasses | 1.5 | | |
| 28-E | Grasses | 0.5 | | |
| 28-F | Grasses | 1.0 | | |
| 28-G | Grasses | 0.5 | | |
| 28-H | Grasses | 1.0 | | |
| 28-I | - | | | |
| 28-J | Grasses | 2.5 | 1.2 | 1.1 |
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RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP

DATE August 16, 1977

VEGETATION TYPE Sagebrush

OBSERVER CVB

PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 29-A | CHE sp. | 2.0 | 3.0 | 0.65 |
| | ERI sp. | 1.5 | 1.4 | 0.45 |
| 29-B | CHE sp. | 1.5 | | |
| 29-C | CHE sp. | 8.0 | | |
| | ERI sp. | 2.0 | | |
| 29-D | Grasses | 0.5 | | |
| | CHE sp. | 0.5 | | |
| 29-E | ERI sp | 0.2 | | |
| 29-F | Grasses | 0.5 | | |
| 29-G | - | | | |
| 29-H | - | | | |
| 29-I | Grasses | 1.0 | | |
| 29-J | - | | | |

# RANGE PRODUCTIVITY FIELD & LAB DATA

PROJECT RBOSP
DATE August 16, 1977
VEGETATION TYPE Sagebrush
OBSERVER CVB
PAGE NO. 1 of 1

| PLOT NO. | SPECIES | ESTIMATED GREEN WEIGHT (GRAMS) | CLIPPED GREEN WEIGHT (GRAMS) | AIR-DRY WEIGHT (GRAMS) |
|---|---|---|---|---|
| 30-A | Grasses | 5.5 | 10.2 | 7.05 |
| 30-B | Grasses | 3.0 | | |
| 30-C | PHL HOO | 0.5 | | |
| | CRY sp | 0.5 | | |
| | Grasses | 2.5 | | |
| 30-D | Grasses | 7.0 | | |
| 30-E | Grasses | 2.5 | | |
| 30-F | Grasses | 3.0 | | |
| 30-G | Grasses | 3.0 | | |
| 30-H | Grasses | 3.0 | | |
| 30-I | Grasses | 3.0 | | |
| 30-J | CRY sp | 0.5 | 0.5 | 0.4 |
| | Grasses | 2.0 | 1.4 | 1.25 |
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APPENDIX E

BROWSE RAW DATA

MAY 1977

## LIST OF ABBREVIATIONS FOR THE PLANT SPECIES SAMPLED IN THE BROWSE STUDIES

| ABBREVIATIONS | SCIENTIFIC NAME |
|---|---|
| ART TRI | *Artemisia tridentata* |
| PUR TRI | *Purshia tridentata* |
| CER MON | *Cercocarpus montanus* |
| JUN OST | *Juniperus osteosperma* |
| PIN EDU | *Pinus edulis* |
| AME UTA | *Amelanchier utahensis* |
| SYM ORE | *Symphoricarpos oreophilus* |

SYMBOL

Indicates that no estimates were made because the shrub was dead.

FORM CLASSES:

1. All available, little or no hedging
2. All available, moderately hedged
3. All available, severely hedged
4. Partially available, little or no hedging
5. Partially available, moderately hedged
6. Partially available, severely hedged
7. Unavailable
8. Dead

AGE CLASSES:

S - Seedling, less than 0.3 cm basal diameter
Y - Young, 0.3 to 0.6 cm basal diameter
M - Mature, over 0.6 cm basal diameter
D - Decandent, more than 25% of crown surface is dead

LEADER USE ESTIMATES:

Percent of twigs or leaders which are available and show use

HEDGING CLASSIFICATION:

Classification based upon the length and appearance (hedging_ of the previous year's growth (the two-year old wood).

1. None to light
2. Moderate
3. Severe

AVAILABILITY:

Visual estimate of the percent of the plant available to deer as browse, i.e., that portion less than six feet tall

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 1

T 1S R 99W S 31 Date: May 5, 1977

Aspect (degrees) N Slope (degrees) ____ Elevation (feet) 7400

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 2 | M | 10 | Light | 100 |
| 2 | Art tri | 1 | M | 10 | Light | 100 |
| 3 | Ame uta | 2 | M | 40 | Light | 100 |
| 4 | Art tri | 5 | D | 50 | Moderate | 50 |
| 5 | Ame uta | 2 | M | 50 | Moderate | 100 |
| 6 | Art tri | 1 | M | 10 | Light | 100 |
| 7 | Ame uta | 2 | M | 10 | Moderate | 100 |
| 8 | Ame uta | 4 | M | 5 | Light | 80 |
| 9 | Ame uta | 1 | M | 10 | Light | 100 |
| 10 | Art tri | 1 | M | 5 | Light | 100 |
| 11 | Ame uta | 2 | M | 20 | Moderate | 100 |
| 12 | Ame uta | 1 | M | 5 | Light | 100 |
| 13 | Ame uta | 2 | M | 15 | Moderate | 100 |
| 14 | Ame uta | 1 | Y | 10 | Light | 100 |
| 15 | Art tri | 1 | M | 10 | None | 100 |
| 16 | Ame uta | 1 | Y | 5 | None | 100 |
| 17 | Sym ore | 6 | D | 5 | Severe | 50 |
| 18 | Art tri | 5 | D | 0 | Moderate | 75 |
| 19 | Art tri | 2 | M | 10 | Moderate | 100 |
| 20 | Ame uta | 2 | M | 75 | Moderate | 100 |
| 21 | Ame uta | 1 | M | 65 | Light | 100 |
| 22 | Art tri | 2 | M | 10 | Moderate | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 1 | M | 5 | Light | 100 |
| 25 | Pin edu | 1 | M | 2 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 2

T 1S R 99W S 31 Date: May 5, 1977

Aspect (degrees) N Slope (degrees) Elevation (feet) 7440

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 1 | Y | 0 | None | 100 |
| 2 | Art tri | 1 | M | 5 | Light | 100 |
| 3 | Ame uta | 3 | M | 15 | Severe | 100 |
| 4 | Sym ore | 2 | M | 20 | Moderate | 100 |
| 5 | Ame uta | 3 | M | 45 | Severe | 100 |
| 6 | Sym ore | 1 | M | 0 | Light | 100 |
| 7 | Ame uta | 1 | M | 10 | Light | 100 |
| 8 | Art tri | 1 | M | 0 | None | 80 |
| 9 | Ame uta | 2 | M | 0 | Moderate | 100 |
| 10 | Ame uta | 1 | Y | 5 | Light | 100 |
| 11 | Ame uta | 1 | Y | 5 | Light | 100 |
| 12 | Ame uta | 6 | D | 15 | Severe | 50 |
| 13 | Sym ore | 1 | M | 0 | Light | 100 |
| 14 | Art tri | 4 | D | 0 | Light | 30 |
| 15 | Sym ore | 2 | M | 5 | Moderate | 100 |
| 16 | Ame uta | 3 | M | 20 | Severe | 100 |
| 17 | Sym ore | 1 | M | 5 | None | 100 |
| 18 | Ame uta | 3 | M | 45 | Severe | 90 |
| 19 | Art tri | 2 | M | 10 | Moderate | 100 |
| 20 | Ame uta | 1 | M | 25 | Light | 100 |
| 21 | Art tri | 1 | M | 2 | Light | 100 |
| 22 | Ame uta | 3 | M | 35 | Severe | 100 |
| 23 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 24 | Ame uta | 3 | M | 75 | Severe | 100 |
| 25 | Art tri | 2 | M | 10 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 3

T 1S R 99W S 31 Date: May 5, 1977

Aspect (degrees) N Slope (degrees) 30 Elevation (feet) 7520

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 3 | M | 5 | Severe | 100 |
| 2 | Sym ore | 2 | M | 5 | Moderate | 100 |
| 3 | Art tri | 4 | D | 10 | Light | 50 |
| 4 | Art tri | 4 | D | 0 | Light | 10 |
| 5 | Art tri | 2 | M | 5 | Moderate | 100 |
| 6 | Sym ore | 2 | Y | 0 | Moderate | 100 |
| 7 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 8 | Art tri | 3 | M | 25 | Severe | 100 |
| 9 | Art tri | 1 | M | 5 | Light | 100 |
| 10 | Art tri | 1 | M | 10 | Light | 100 |
| 11 | Sym ore | 1 | M | 0 | Light | 100 |
| 12 | Ame uta | 2 | M | 5 | Moderate | 100 |
| 13 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 2 | M | 5 | Moderate | 100 |
| 16 | Ame uta | 2 | M | 20 | Moderate | 100 |
| 17 | Art tri | 2 | M | 5 | Moderate | 100 |
| 18 | Art tri | 3 | M | 10 | Severe | 100 |
| 19 | Ame uta | 6 | D | 10 | Severe | 100 |
| 20 | Art tri | 5 | D | 6 | Moderate | 35 |
| 21 | Art tri | 2 | Y | 25 | Moderate | 100 |
| 22 | Ame uta | 1 | M | 10 | Light | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Ame uta | 3 | M | 10 | Severe | 100 |
| 25 | Sym ore | 2 | M | 100 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush    Sample Unit #: 4

T 1S  R 99W  S 31    Date: May 5, 1977

Aspect (degrees) N  Slope (degrees) 10  Elevation (feet) 7600

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 3 | M | 10 | Severe | 100 |
| 2 | Sym ore | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 6 | D | 5 | Severe | 20 |
| 4 | Sym ore | 1 | Y | 0 | Light | 100 |
| 5 | Ame uta | 3 | M | 10 | Severe | 100 |
| 6 | Art tri | 2 | M | 15 | Moderate | 100 |
| 7 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 8 | Art tri | 2 | M | 0 | Moderate | 100 |
| 9 | Sym ore | 5 | D | 0 | Moderate | 20 |
| 10 | Art tri | 2 | M | 0 | Moderate | 100 |
| 11 | Art tri | 8 | D | - | - | 0 |
| 12 | Art tri | 1 | Y | 0 | Light | 100 |
| 13 | Art tri | 2 | Y | 0 | Moderate | 100 |
| 14 | Sym ore | 2 | M | 40 | Moderate | 100 |
| 15 | Ame uta | 2 | M | 20 | Moderate | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 100 |
| 17 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Ame uta | 3 | M | 5 | Severe | 100 |
| 20 | Sym ore | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 1 | M | 0 | Light | 100 |
| 23 | Ame uta | 1 | M | 70 | Light | 100 |
| 24 | Ame uta | 1 | M | 30 | Light | 100 |
| 25 | Ame uta | 5 | D | 25 | Moderate | 50 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 5

T 2S R 99W S 4 Date: May 6, 1977

Aspect (degrees) N Slope (degrees) 5 Elevation (feet) 7000

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 2 | M | 5 | Moderate | 100 |
| 2 | Pur tri | 6 | D | 90 | Severe | 30 |
| 3 | Pur tri | 2 | M | 75 | Moderate | 100 |
| 4 | Pin edu | 1 | Y | 0 | Light | 100 |
| 5 | Pin edu | 2 | M | 10 | Moderate | 100 |
| 6 | Pur tri | 8 | D | - | - | 0 |
| 7 | Pin edu | 2 | M | 5 | Moderate | 100 |
| 8 | Pin edu | 1 | M | 2 | Light | 100 |
| 9 | Pur tri | 6 | D | 85 | Severe | 40 |
| 10 | Art tri | 6 | D | 15 | Severe | 50 |
| 11 | Pin edu | 1 | M | 5 | Light | 100 |
| 12 | Pin edu | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 6 | D | 0 | Severe | 50 |
| 14 | Jun ost | 3 | M | 5 | Severe | 100 |
| 15 | Art tri | 3 | M | 20 | Severe | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 100 |
| 17 | Pin edu | 8 | D | - | - | 0 |
| 18 | Pin edu | 1 | S | 0 | Light | 100 |
| 19 | Art tri | 2 | M | 5 | Moderate | 100 |
| 20 | Pin edu | 4 | M | 0 | Light | 20 |
| 21 | Art tri | 1 | M | 0 | Light | 100 |
| 22 | Sym ore | 6 | D | 20 | Severe | 20 |
| 23 | Jun ost | 2 | M | 0 | Moderate | 100 |
| 24 | Jun ost | 2 | M | 0 | Moderate | 100 |
| 25 | Pin edu | 1 | Y | 30 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush    Sample Unit #: 6

T 2S R 99W S 6    Date: May 5, 1977

Aspect (degrees) S    Slope (degrees) 30    Elevation (feet) 7440

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 3 | M | 20 | Severe | 100 |
| 2 | Ame uta | 3 | M | 10 | Severe | 100 |
| 3 | Pin edu | 2 | M | 5 | Moderate | 100 |
| 4 | Sym ore | 3 | M | 90 | Severe | 100 |
| 5 | Pin edu | 4 | M | 10 | Light | 30 |
| 6 | Ame uta | 8 | D | - | Severe | 0 |
| 7 | Ame uta | 3 | M | 40 | Severe | 80 |
| 8 | Sym ore | 1 | Y | 0 | Light | 100 |
| 9 | Cer mon | 3 | M | 90 | Severe | 90 |
| 10 | Ame uta | 3 | M | 30 | Severe | 100 |
| 11 | Cer mon | 3 | M | 40 | Severe | 100 |
| 12 | Ame uta | 6 | D | 75 | Severe | 35 |
| 13 | Ame uta | 2 | M | 50 | Moderate | 100 |
| 14 | Ame uta | 5 | D | 0 | Moderate | 5 |
| 15 | Ame uta | 2 | M | 20 | Moderate | 100 |
| 16 | Cer mon | 2 | M | 90 | Moderate | 100 |
| 17 | Cer mon | 2 | M | 40 | Moderate | 100 |
| 18 | Ame uta | 2 | M | 10 | Moderate | 100 |
| 19 | Cer mon | 2 | M | 50 | Moderate | 100 |
| 20 | Ame uta | 2 | M | 10 | Moderate | 80 |
| 21 | Cer mon | 2 | M | 15 | Moderate | 100 |
| 22 | Cer mon | 3 | M | 15 | Severe | 100 |
| 23 | Cer mon | 3 | M | 30 | Severe | 100 |
| 24 | Cer mon | 2 | M | 25 | Moderate | 100 |
| 25 | Cer mon | 5 | D | 20 | Moderate | 40 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 7

T 2S R 99W S 4 Date: May 6, 1977

Aspect (degrees) S Slope (degrees) 30 Elevation (feet) 7000

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 4 | M | 10 | Light | 50 |
| 2 | Art tri | 6 | D | 0 | Severe | 30 |
| 3 | Art tri | 5 | D | 0 | Moderate | 20 |
| 4 | Art tri | 6 | D | 0 | Severe | 50 |
| 5 | Pin edu | 4 | M | 0 | Light | 60 |
| 6 | Jun ost | 4 | D | 0 | Light | 20 |
| 7 | Art tri | 3 | M | 10 | Severe | 100 |
| 8 | Art tri | 3 | M | 0 | Severe | 100 |
| 9 | Art tri | 3 | M | 5 | Severe | 100 |
| 10 | Art tri | 1 | M | 10 | Light | 100 |
| 11 | Pin edu | 4 | M | 5 | Light | 30 |
| 12 | Art tri | 3 | M | 5 | Severe | 100 |
| 13 | Art tri | 1 | M | 5 | Light | 100 |
| 14 | Jun ost | 8 | D | - | - | 0 |
| 15 | Art tri | 3 | M | 50 | Severe | 100 |
| 16 | Art tri | 2 | M | 5 | Moderate | 100 |
| 17 | Art tri | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 2 | M | 15 | Moderate | 100 |
| 19 | Art tri | 2 | M | 20 | Moderate | 100 |
| 20 | Pin edu | 1 | M | 5 | Light | 100 |
| 21 | Art tri | 6 | D | 0 | Severe | 50 |
| 22 | Pin edu | 4 | M | 5 | Light | 80 |
| 23 | Pin edu | 4 | M | 15 | Light | 80 |
| 24 | Art tri | 3 | M | 5 | Severe | 100 |
| 25 | Jun ost | 4 | M | 0 | Light | 80 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush    Sample Unit #: 8

T 2S R 99W S 4    Date: May 6, 1977

Aspect (degrees) N    Slope (degrees) 60    Elevation (feet) 7120

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 3 | M | 5 | Severe | 100 |
| 2 | Ame uta | 1 | M | 5 | Light | 100 |
| 3 | Art tri | 6 | D | 15 | Severe | 50 |
| 4 | Art tri | 6 | M | 0 | Severe | 80 |
| 5 | Art tri | 6 | D | 0 | Severe | 50 |
| 6 | Art tri | 6 | D | 0 | Severe | 15 |
| 7 | Art tri | 5 | D | 0 | Moderate | 20 |
| 8 | Art tri | 8 | D | - | - | 0 |
| 9 | Sym ore | 3 | M | 25 | Severe | 100 |
| 10 | Art tri | 6 | D | 0 | Severe | 20 |
| 11 | Art tri | 5 | D | 5 | Moderate | 75 |
| 12 | Art tri | 6 | D | 5 | Severe | 50 |
| 13 | Ame uta | 2 | M | 50 | Moderate | 100 |
| 14 | Art tri | 3 | M | 0 | Severe | 100 |
| 15 | Art tri | 8 | D | - | - | 0 |
| 16 | Art tri | 6 | M | 5 | Severe | 90 |
| 17 | Sym ore | 5 | D | 0 | Moderate | 5 |
| 18 | Sym ore | 5 | D | 0 | Moderate | 5 |
| 19 | Sym ore | 5 | D | 0 | Moderate | 10 |
| 20 | Ame uta | 1 | Y | 0 | None | 100 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Art tri | 3 | M | 5 | Severe | 100 |
| 23 | Art tri | 3 | M | 5 | Severe | 100 |
| 24 | Art tri | 6 | M | 0 | Severe | 90 |
| 25 | Art tri | 6 | D | 5 | Severe | 50 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 9

T 2S R 99W S 4 Date: May 6, 1977

Aspect (degrees) N Slope (degrees) 10-15 Elevation (feet) 7080

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 5 | D | 0 | Moderate | 25 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 1 | Y | 0 | None | 100 |
| 4 | Art tri | 8 | D | - | - | 0 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 8 | D | - | - | 0 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 2 | M | 5 | Moderate | 100 |
| 10 | Art tri | 5 | D | 0 | Moderate | 10 |
| 11 | Art tri | 1 | M | 0 | Light | 100 |
| 12 | Art tri | 1 | M | 0 | Light | 100 |
| 13 | Art tri | 8 | D | - | - | 0 |
| 14 | Sym ore | 4 | D | 25 | Light | 20 |
| 15 | Art tri | 5 | D | 0 | Moderate | 60 |
| 16 | Art tri | 6 | D | 0 | Severe | 50 |
| 17 | Art tri | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Art tri | 4 | D | 25 | Light | 50 |
| 23 | Art tri | 2 | M | 5 | Moderate | 100 |
| 24 | Art tri | 8 | D | - | - | 0 |
| 25 | Art tri | 1 | Y | 0 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 10

T 2S R 99W S 4 Date: May 6, 1977

Aspect (degrees) N Slope (degrees) 0-5 Elevation (feet) 7040

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 1 | M | 2 | Light | 100 |
| 2 | Art tri | 8 | D | - | - | 0 |
| 3 | Art tri | 2 | M | 0 | Moderate | 100 |
| 4 | Art tri | 5 | D | 0 | Moderate | 40 |
| 5 | Art tri | 5 | D | 0 | Moderate | 60 |
| 6 | Art tri | 2 | M | 0 | Moderate | 100 |
| 7 | Art tri | 6 | D | 2 | Severe | 75 |
| 8 | Art tri | 6 | D | 0 | Severe | 45 |
| 9 | Art tri | 5 | D | 0 | Moderate | 30 |
| 10 | Art tri | 2 | M | 0 | Moderate | 100 |
| 11 | Art tri | 2 | M | 0 | Moderate | 100 |
| 12 | Art tri | 5 | M | 5 | Moderate | 80 |
| 13 | Art tri | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 4 | D | 0 | Light | 60 |
| 16 | Art tri | 8 | D | - | - | 0 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 2 | M | 0 | Moderate | 100 |
| 19 | Art tri | 8 | D | - | Moderate | 0 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 5 | D | 0 | Moderate | 35 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 6 | D | 0 | Severe | 40 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 11

T 2S R 99W S 4 Date: May 6, 1977

Aspect (degrees) S Slope (degrees) Elevation (feet) 7080

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 4 | M | 0 | Light | 10 |
| 2 | Pin edu | 5 | M | 25 | Moderate | 20 |
| 3 | Pur tri | 8 | D | - | - | 0 |
| 4 | Pur tri | 2 | M | 90 | Moderate | 100 |
| 5 | Pur tri | 3 | M | 90 | Severe | 100 |
| 6 | Pur tri | 3 | M | 90 | Moderate | 100 |
| 7 | Jun ost | 1 | M | 0 | Light | 100 |
| 8 | Pin edu | 5 | M | 10 | Moderate | 30 |
| 9 | Pin edu | 5 | M | 5 | Moderate | 75 |
| 10 | Jun ost | 5 | M | 0 | Moderate | 20 |
| 11 | Pur tri | 3 | M | 90 | Severe | 100 |
| 12 | Pur tri | 3 | M | 90 | Severe | 100 |
| 13 | Pur tri | 3 | M | 80 | Severe | 100 |
| 14 | Pur tri | 3 | M | 95 | Severe | 100 |
| 15 | Pin edu | 2 | M | 5 | Moderate | 100 |
| 16 | Pin edu | 3 | M | 75 | Severe | 100 |
| 17 | Jun ost | 5 | M | 0 | Moderate | 15 |
| 18 | Pur tri | 2 | M | 95 | Moderate | 85 |
| 19 | Pin edu | 1 | M | 0 | Light | 100 |
| 20 | Pur tri | 2 | M | 90 | Moderate | 100 |
| 21 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 22 | Pur tri | 6 | D | 70 | Severe | 50 |
| 23 | Pin edu | 1 | Y | 80 | Light | 100 |
| 24 | Jun ost | 4 | M | 0 | Light | 5 |
| 25 | Pur tri | 8 | D | - | - | 0 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 12

T 1S R 99W S 34 Date: May 6, 1977

Aspect (degrees) NE Slope (degrees) <5 Elevation (feet) 6800

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 7 | M | - | Moderate | 0 |
| 2 | Cer mon | 3 | M | 100 | Severe | 100 |
| 3 | Cer mon | 3 | M | 95 | Severe | 100 |
| 4 | Pur tri | 2 | M | 80 | Moderate | 100 |
| 5 | Ame uta | 6 | M | 60 | Severe | 80 |
| 6 | Cer mon | 6 | M | 80 | Severe | 90 |
| 7 | Pin edu | 7 | M | - | Moderate | 0 |
| 8 | Pin edu | 5 | M | 0 | Moderate | 10 |
| 9 | Art tri | 4 | D | 5 | Light | 20 |
| 10 | Cer mon | 6 | M | 100 | Severe | 80 |
| 11 | Art tri | 4 | D | 5 | Light | 40 |
| 12 | Cer mon | 6 | D | 90 | Severe | 25 |
| 13 | Jun ost | 1 | M | 0 | Light | 10 |
| 14 | Art tri | 5 | M | 20 | Moderate | 80 |
| 15 | Pin edu | 5 | M | 10 | Moderate | 15 |
| 16 | Pin edu | 7 | M | - | Moderate | 0 |
| 17 | Pin edu | 7 | M | - | Light | 0 |
| 18 | Jun ost | 8 | D | - | - | 0 |
| 19 | Art tri | 2 | M | 40 | Moderate | 100 |
| 20 | Pin edu | 6 | M | 10 | Severe | 15 |
| 21 | Cer mon | 8 | D | - | Severe | 10 |
| 22 | Cer mon | 3 | M | 95 | Severe | 100 |
| 23 | Cer mon | 3 | M | 75 | Severe | 100 |
| 24 | Pin edu | 1 | S | 0 | None | 100 |
| 25 | Cer mon | 3 | M | 85 | Severe | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 13

T 1S R 99W S 34 Date: May 6, 1977

Aspect (degrees) E Slope (degrees) 1 Elevation (feet) 6600

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 8 | D | - | - | 0 |
| 2 | Art tri | 4 | M | 0 | Light | 35 |
| 3 | Art tri | 4 | D | 0 | Light | 50 |
| 4 | Art tri | 1 | M | 0 | None | 100 |
| 5 | Art tri | 1 | M | 0 | None | 100 |
| 6 | Art tri | 8 | D | - | - | 0 |
| 7 | Art tri | 4 | D | 0 | Light | 25 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 8 | D | - | Light | 0 |
| 10 | Art tri | 1 | M | 0 | Light | 100 |
| 11 | Art tri | 8 | D | 10 | None | 0 |
| 12 | Art tri | 4 | D | 0 | None | 25 |
| 13 | Art tri | 1 | M | 0 | None | 100 |
| 14 | Art tri | 4 | D | 0 | None | 20 |
| 15 | Art tri | 8 | D | - | None | 0 |
| 16 | Art tri | 1 | M | 0 | None | 100 |
| 17 | Art tri | 1 | M | 0 | None | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Art tri | 4 | D | 5 | Light | 50 |
| 20 | Art tri | 4 | M | 0 | None | 90 |
| 21 | Art tri | 8 | D | - | Light | 0 |
| 22 | Art tri | 1 | M | 0 | None | 100 |
| 23 | Art tri | 1 | M | 0 | None | 100 |
| 24 | Art tri | 4 | M | 0 | None | 80 |
| 25 | Art tri | 4 | M | 0 | None | 80 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 14

T 1S R 99W S 33 Date: May 7, 1977

Aspect (degrees) SE Slope (degrees) 15 Elevation (feet) 6820

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 1 | M | 0 | Light | 100 |
| 2 | Art tri | 1 | M | 0 | None | 100 |
| 3 | Art tri | 5 | D | 0 | Moderate | 35 |
| 4 | Art tri | 1 | M | 0 | Light | 100 |
| 5 | Art tri | 3 | M | 0 | Severe | 100 |
| 6 | Art tri | 8 | D | - | Moderate | 0 |
| 7 | Art tri | 4 | M | 0 | Light | 80 |
| 8 | Art tri | 1 | M | 0 | None | 100 |
| 9 | Art tri | 8 | D | - | Moderate | 0 |
| 10 | Art tri | 5 | D | 0 | Moderate | 30 |
| 11 | Art tri | 1 | M | 0 | None | 100 |
| 12 | Art tri | 8 | D | - | Severe | 0 |
| 13 | Art tri | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 2 | M | 0 | Moderate | 50 |
| 16 | Art tri | 1 | M | 0 | None | 100 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 1 | M | 0 | Light | 100 |
| 19 | Art tri | 1 | M | 0 | Light | 90 |
| 20 | Art tri | 1 | M | 0 | None | 100 |
| 21 | Art tri | 1 | M | 0 | None | 100 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 5 | D | 0 | Moderate | 20 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 2 | M | 0 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 15

T 2S R 99W S 5 Date: May 7, 1977

Aspect (degrees) S Slope (degrees) 10-15 Elevation (feet) 7040

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 5 | M | 0 | Moderate | 90 |
| 2 | Art tri | 2 | M | 40 | Moderate | 100 |
| 3 | Art tri | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 1 | M | 10 | None | 100 |
| 5 | Art tri | 5 | D | 0 | Moderate | 50 |
| 6 | Art tri | 5 | D | 0 | Moderate | 50 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 8 | D | - | Light | 0 |
| 10 | Art tri | 8 | D | - | - | 0 |
| 11 | Art tri | 4 | D | 0 | Light | 40 |
| 12 | Art tri | 1 | M | 0 | Light | 100 |
| 13 | Art tri | 5 | D | 0 | Moderate | 75 |
| 14 | Art tri | 8 | D | - | - | 0 |
| 15 | Art tri | 2 | M | 0 | Moderate | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 100 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 8 | D | - | Light | 0 |
| 19 | Art tri | 5 | M | 0 | Moderate | 90 |
| 20 | Art tri | 2 | M | 0 | Moderate | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 4 | M | 0 | None | 90 |
| 24 | Art tri | 1 | M | 5 | None | 100 |
| 25 | Art tri | 1 | M | 5 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 16

T 2S R 99W S 2 Date: May 7, 1977

Aspect (degrees) E Slope (degrees) 40 Elevation (feet) 6880

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 4 | M | 5 | Light | 40 |
| 2 | Pin edu | 2 | M | 15 | Moderate | 100 |
| 3 | Art tri | 4 | D | 0 | Light | 50 |
| 4 | Jun ost | 4 | M | 0 | Light | 30 |
| 5 | Art tri | 4 | D | 0 | Light | 15 |
| 6 | Pin edu | 1 | S | 0 | None | 100 |
| 7 | Jun ost | 8 | D | - | - | 0 |
| 8 | Pin edu | 1 | S | 0 | None | 100 |
| 9 | Art tri | 8 | D | - | Light | 0 |
| 10 | Art tri | 2 | M | 5 | Moderate | 100 |
| 11 | Jun ost | 5 | M | 0 | Moderate | 5 |
| 12 | Jun ost | 8 | D | - | - | 0 |
| 13 | Art tri | 4 | D | 5 | Light | 50 |
| 14 | Sym ore | 3 | M | 100 | Severe | 100 |
| 15 | Sym ore | 3 | M | 90 | Severe | 100 |
| 16 | Sym ore | 3 | D | 50 | Severe | 75 |
| 17 | Sym ore | 2 | M | 75 | Moderate | 100 |
| 18 | Art tri | 6 | M | 40 | Severe | 80 |
| 19 | Art tri | 4 | D | 20 | Light | 50 |
| 20 | Pur tri | 6 | D | 90 | Severe | 30 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Pin edu | 4 | M | 10 | Light | 40 |
| 23 | Jun ost | 1 | M | 10 | Light | 100 |
| 24 | Art tri | 8 | D | - | Severe | 0 |
| 25 | Cer mon | 6 | M | 95 | Severe | 80 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 17

T 2S R 99W S 3 Date: May 6, 1977

Aspect (degrees) NW Slope (degrees) 15 Elevation (feet) 6950

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 5 | M | 5 | Moderate | 20 |
| 2 | Art tri | 1 | M | 50 | Light | 100 |
| 3 | Art tri | 2 | M | 15 | Moderate | 100 |
| 4 | Art tri | 5 | D | 25 | Moderate | 50 |
| 5 | Art tri | 2 | M | 5 | Moderate | 100 |
| 6 | Art tri | 2 | M | 5 | Moderate | 100 |
| 7 | Art tri | 6 | D | 35 | Severe | 20 |
| 8 | Art tri | 1 | S | 50 | Light | 100 |
| 9 | Cer mon | 6 | D | 90 | Severe | 40 |
| 10 | Cer mon | 6 | M | 90 | Severe | 85 |
| 11 | Pin edu | 1 | Y | 75 | Light | 100 |
| 12 | Cer mon | 3 | M | 85 | Severe | 100 |
| 13 | Cer mon | 3 | M | 75 | Severe | 100 |
| 14 | Jun ost | 7 | M | - | Moderate | 0 |
| 15 | Jun ost | 6 | M | 0 | Severe | 10 |
| 16 | Jun ost | 8 | D | - | - | 0 |
| 17 | Art tri | 6 | D | 10 | Severe | 60 |
| 18 | Art tri | 3 | M | 30 | Severe | 100 |
| 19 | Art tri | 8 | D | - | Severe | 0 |
| 20 | Art tri | 3 | M | 40 | Severe | 100 |
| 21 | Pur tri | 2 | M | 90 | Moderate | 100 |
| 22 | Cer mon | 6 | M | 95 | Severe | 80 |
| 23 | Cer mon | 5 | M | 75 | Moderate | 90 |
| 24 | Art tri | 6 | D | 35 | Severe | 60 |
| 25 | Cer mon | 5 | M | 80 | Moderate | 90 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 18

T 2S R 99W S 10 Date: May 5, 1977

Aspect (degrees) SE Slope (degrees) 1 Elevation (feet) 7100

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 7 | M | - | None | 0 |
| 2 | Pin edu | 3 | M | 100 | Severe | 100 |
| 3 | Art tri | 8 | D | - | - | 0 |
| 4 | Pin edu | 3 | M | 100 | Severe | 100 |
| 5 | Art tri | 8 | D | - | - | 0 |
| 6 | Jun ost | 4 | M | 0 | Light | 5 |
| 7 | Pin edu | 5 | M | 5 | Moderate | 5 |
| 8 | Art tri | 1 | M | 10 | Light | 100 |
| 9 | Pur tri | 5 | M | 60 | Moderate | 80 |
| 10 | Pur tri | 1 | M | 65 | Light | 100 |
| 11 | Pur tri | 5 | D | 60 | Moderate | 40 |
| 12 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 13 | Pur tri | 2 | M | 75 | Moderate | 100 |
| 14 | Jun ost | 7 | M | 0 | Light | 15 |
| 15 | Pur tri | 8 | D | - | - | 0 |
| 16 | Jun ost | 5 | M | 0 | Moderate | 25 |
| 17 | Pur tri | 2 | M | 70 | Moderate | 100 |
| 18 | Pur tri | 5 | D | 70 | Moderate | 20 |
| 19 | Pur tri | 3 | M | 80 | Severe | 100 |
| 20 | Pur tri | 2 | M | 95 | Moderate | 100 |
| 21 | Pur tri | 3 | M | 90 | Severe | 100 |
| 22 | Pur tri | 2 | M | 90 | Moderate | 100 |
| 23 | Pur tri | 2 | M | 30 | Moderate | 100 |
| 24 | Pur tri | 3 | M | 50 | Severe | 100 |
| 25 | Jun ost | 5 | M | 0 | Moderate | 20 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 19

T 2S R 99W S 9 Date: May 6, 1977

Aspect (degrees) SE Slope (degrees) 1 Elevation (feet) 7340

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 4 | D | 0 | Light | 60 |
| 2 | Pur tri | 5 | D | 30 | Moderate | 30 |
| 3 | Pin edu | 1 | M | 5 | Light | 100 |
| 4 | Art tri | 1 | M | 0 | Light | 100 |
| 5 | Jun ost | 4 | M | 0 | Light | 50 |
| 6 | Jun ost | 4 | M | 5 | Light | 50 |
| 7 | Pin edu | 1 | M | 25 | Light | 100 |
| 8 | Art tri | 2 | M | 5 | Moderate | 100 |
| 9 | Art tri | 2 | M | 5 | Moderate | 100 |
| 10 | Pin edu | 4 | M | 5 | Light | 60 |
| 11 | Jun ost | 4 | M | 0 | Light | 75 |
| 12 | Pin edu | 4 | M | 20 | Light | 15 |
| 13 | Art tri | 3 | M | 0 | Severe | 100 |
| 14 | Art tri | 3 | M | 0 | Severe | 100 |
| 15 | Jun ost | 1 | M | 0 | Light | 100 |
| 16 | Pin edu | 3 | M | 40 | Severe | 100 |
| 17 | Art tri | 2 | M | 60 | Moderate | 100 |
| 18 | Art tri | 2 | M | 0 | Moderate | 100 |
| 19 | Art tri | 1 | M | 50 | Light | 100 |
| 20 | Art tri | 8 | D | - | - | 0 |
| 21 | Art tri | 4 | D | 0 | Light | 30 |
| 22 | Art tri | 6 | D | 5 | Severe | 20 |
| 23 | Art tri | 6 | D | 0 | Severe | 35 |
| 24 | Art tri | 5 | D | 10 | Moderate | 75 |
| 25 | Pin edu | 3 | M | 50 | Severe | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush    Sample Unit #: 20

T 2S R 99W S 9    Date: May 6, 1977

Aspect (degrees) SW Slope (degrees) 50 Elevation (feet) 7200

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 3 | M | 0 | Severe | 100 |
| 2 | Art tri | 2 | M | 0 | Moderate | 100 |
| 3 | Art tri | 6 | D | 10 | Severe | 75 |
| 4 | Art tri | 3 | M | 0 | Severe | 100 |
| 5 | Ame uta | 1 | S | 0 | None | 100 |
| 6 | Art tri | 6 | D | 0 | Severe | 50 |
| 7 | Art tri | 8 | D | - | - | 0 |
| 8 | Art tri | 8 | D | - | - | 0 |
| 9 | Art tri | 2 | M | 10 | Moderate | 100 |
| 10 | Art tri | 6 | D | 10 | Severe | 65 |
| 11 | Art tri | 3 | M | 0 | Severe | 100 |
| 12 | Art tri | 8 | D | - | Severe | 0 |
| 13 | Art tri | 6 | D | 10 | Severe | 75 |
| 14 | Art tri | 6 | M | 10 | Severe | 90 |
| 15 | Art tri | 6 | D | 15 | Severe | 50 |
| 16 | Art tri | 2 | M | 5 | Moderate | 100 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 6 | D | 5 | Severe | 50 |
| 19 | Art tri | 8 | D | - | - | 0 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 6 | D | 0 | Severe | 50 |
| 23 | Art tri | 6 | D | 10 | Severe | 75 |
| 24 | Art tri | 1 | M | 5 | Light | 100 |
| 25 | Art tri | 1 | M | 0 | Light | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 21

T 2S R 99W S 9 Date: May 6, 1977

Aspect (degrees) W Slope (degrees) 20 Elevation (feet) 7200

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 3 | M | 20 | Severe | 100 |
| 2 | Art tri | 6 | M | 40 | Severe | 80 |
| 3 | Art tri | 5 | M | 50 | Moderate | 80 |
| 4 | Art tri | 5 | M | 10 | Moderate | 60 |
| 5 | Art tri | 6 | M | 5 | Severe | 80 |
| 6 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 3 | M | 100 | Severe | 100 |
| 9 | Art tri | 6 | D | 25 | Severe | 75 |
| 10 | Art tri | 6 | D | 90 | Severe | 20 |
| 11 | Art tri | 6 | M | 90 | Severe | 80 |
| 12 | Art tri | 6 | D | 100 | Severe | 15 |
| 13 | Art tri | 2 | M | 5 | Moderate | 100 |
| 14 | Art tri | 6 | M | 75 | Severe | 80 |
| 15 | Art tri | 3 | M | 10 | Severe | 100 |
| 16 | Art tri | 3 | M | 15 | Severe | 80 |
| 17 | Art tri | 6 | D | 15 | Severe | 45 |
| 18 | Art tri | 6 | D | 5 | Severe | 75 |
| 19 | Art tri | 6 | D | 10 | Severe | 50 |
| 20 | Art tri | 6 | D | 35 | Severe | 65 |
| 21 | Art tri | 2 | M | 5 | Moderate | 100 |
| 22 | Art tri | 6 | D | 5 | Severe | 50 |
| 23 | Pin edu | 1 | M | 0 | Light | 100 |
| 24 | Art tri | 2 | M | 10 | Moderate | 100 |
| 25 | Art tri | 6 | M | 5 | Severe | 90 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 22

T 2S R 99W S 17 Date: May 7, 1977

Aspect (degrees) E Slope (degrees) 7-8 Elevation (feet) 7300

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 2 | M | 15 | Moderate | 100 |
| 2 | Art tri | 6 | D | 15 | Severe | 50 |
| 3 | Art tri | 2 | M | 10 | Moderate | 100 |
| 4 | Art tri | 8 | D | - | Moderate | 0 |
| 5 | Ame uta | 2 | M | 20 | Light | 100 |
| 6 | Art tri | 5 | M | 10 | Moderate | 90 |
| 7 | Ame uta | 8 | D | - | None | 0 |
| 8 | Art tri | 6 | D | 5 | Severe | 50 |
| 9 | Art tri | 8 | D | - | - | 0 |
| 10 | Art tri | 6 | D | 0 | Severe | 60 |
| 11 | Art tri | 2 | M | 20 | Moderate | 100 |
| 12 | Art tri | 8 | D | - | - | 0 |
| 13 | Art tri | 5 | D | 75 | Moderate | 25 |
| 14 | Art tri | 5 | D | 0 | Moderate | 30 |
| 15 | Ame uta | 1 | M | 0 | Light | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 90 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Ame uta | 1 | M | 5 | Light | 100 |
| 19 | Art tri | 4 | M | 5 | Light | 90 |
| 20 | Art tri | 1 | M | 5 | Light | 100 |
| 21 | Art tri | 6 | D | 0 | Severe | 10 |
| 22 | Art tri | 3 | M | 10 | Severe | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 6 | D | 5 | Severe | 60 |
| 25 | Art tri | 2 | M | 20 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 23

T 1S R 99W S 13 Date: May 7, 1977

Aspect (degrees) NE Slope (degrees) 2-3 Elevation (feet) 6600

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 1 | M | 0 | Light | 100 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 1 | Y | 0 | None | 100 |
| 4 | Art tri | 1 | Y | 0 | None | 100 |
| 5 | Art tri | 1 | M | 5 | Light | 100 |
| 6 | Art tri | 1 | M | 0 | Light | 100 |
| 7 | Art tri | 5 | D | 0 | Moderate | 20 |
| 8 | Art tri | 5 | D | 0 | Moderate | 20 |
| 9 | Art tro | 3 | M | 5 | Severe | 100 |
| 10 | Art tri | 5 | D | 5 | Moderate | 75 |
| 11 | Art tri | 6 | D | 0 | Severe | 65 |
| 12 | Art tri | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 5 | M | 0 | Moderate | 90 |
| 14 | Art tri | 2 | M | 0 | Moderate | 100 |
| 15 | Art tri | 6 | D | 50 | Severe | 50 |
| 16 | Jun ost | 4 | M | 0 | Light | 10 |
| 17 | Art tri | 5 | D | 35 | Moderate | 20 |
| 18 | Art tri | 6 | D | 60 | Severe | 75 |
| 19 | Art tri | 8 | D | - | - | 0 |
| 20 | Art tri | 2 | M | 5 | Moderate | 100 |
| 21 | Art tri | 3 | M | 30 | Severe | 100 |
| 22 | Art tri | 8 | D | - | - | 0 |
| 23 | Art tri | 8 | D | - | Severe | 0 |
| 24 | Art tri | 4 | M | 10 | Light | 80 |
| 25 | Jun ost | 4 | M | 0 | Light | 15 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 24

T 1S R 99W S 13 Date: May 7, 1977

Aspect (degrees) E Slope (degrees) 1-2 Elevation (feet) 6640

Field Analyst(s): C. V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 5 | D | 0 | Moderate | 75 |
| 2 | Art tri | 1 | M | 5 | Light | 100 |
| 3 | Art tri | 2 | M | 5 | Moderate | 100 |
| 4 | Art tri | 3 | M | 0 | Severe | 100 |
| 5 | Art tri | 2 | M | 5 | Moderate | 100 |
| 6 | Art tri | 6 | D | 5 | Severe | 60 |
| 7 | Art tri | 6 | D | 0 | Severe | 25 |
| 8 | Art tri | 5 | M | 5 | Light | 95 |
| 9 | Art tri | 5 | D | 0 | Moderate | 50 |
| 10 | Art tri | 8 | D | - | - | 0 |
| 11 | Art tri | 8 | D | - | Moderate | 0 |
| 12 | Art tri | 5 | D | 5 | Moderate | 75 |
| 13 | Art tri | 5 | D | 5 | Moderate | 50 |
| 14 | Art tri | 2 | M | 0 | Moderate | 100 |
| 15 | Art tri | 8 | D | - | - | 0 |
| 16 | Art tri | 8 | D | - | Severe | 0 |
| 17 | Art tri | 8 | D | - | Severe | 0 |
| 18 | Art tri | 6 | D | 0 | Severe | 60 |
| 19 | Art tri | 8 | D | - | - | 0 |
| 20 | Art tri | 2 | M | 0 | Moderate | 100 |
| 21 | Art tri | 1 | M | 0 | Light | 100 |
| 22 | Art tri | 8 | D | - | - | 0 |
| 23 | Art tri | 3 | M | 5 | Severe | 100 |
| 24 | Art tri | 3 | M | 20 | Severe | 100 |
| 25 | Art tri | 2 | M | 0 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 25

T 1S R 99W S 13 Date: May 7, 1977

Aspect (degrees) ________ Slope (degrees) ________ Elevation (feet) 6640

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 4 | M | 0 | Light | 75 |
| 2 | Jun ost | 4 | D | 0 | Light | 50 |
| 3 | Jun ost | 3 | M | 0 | Severe | 85 |
| 4 | Art tri | 6 | D | 10 | Severe | 75 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 6 | D | 10 | Severe | 60 |
| 7 | Art tri | 6 | D | 30 | Severe | 60 |
| 8 | Art tri | 6 | D | 5 | Severe | 50 |
| 9 | Art tri | 3 | M | 5 | Severe | 100 |
| 10 | Art tri | 6 | D | 0 | Severe | 10 |
| 11 | Art tri | 6 | D | 0 | Severe | 65 |
| 12 | Art tri | 5 | D | 0 | Moderate | 75 |
| 13 | Art tri | 1 | M | 5 | Light | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 1 | M | 0 | Light | 100 |
| 16 | Art tri | 8 | D | - | Moderate | 0 |
| 17 | Art tri | 1 | M | 0 | Light | 100 |
| 18 | Art tri | 2 | M | 5 | Moderate | 100 |
| 19 | Art tri | 5 | M | 5 | Moderate | 90 |
| 20 | Art tri | 3 | M | 5 | Severe | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 8 | D | - | - | 0 |
| 23 | Art tri | 1 | M | 5 | Light | 100 |
| 24 | Art tri | 3 | M | 10 | Severe | 100 |
| 25 | Art tri | 5 | D | 20 | Moderate | 50 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 26

T 1S R 99W S 24 Date: May 7, 1977

Aspect (degrees)_____ Slope (degrees)_____ Elevation (feet) 6620

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 2 | M | 5 | Moderate | 100 |
| 2 | Art tri | 6 | D | 10 | Severe | 65 |
| 3 | Art tri | 8 | D | - | - | 0 |
| 4 | Art tri | 8 | D | - | - | 0 |
| 5 | Art tri | 6 | D | 40 | Severe | 30 |
| 6 | Art tri | 6 | D | 0 | Severe | 40 |
| 7 | Art tri | 6 | D | 5 | Severe | 45 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 8 | D | - | Severe | 0 |
| 10 | Art tri | 6 | D | 0 | Severe | 50 |
| 11 | Art tri | 1 | M | 0 | Light | 100 |
| 12 | Art tri | 4 | D | 0 | Light | 25 |
| 13 | Art tri | 3 | M | 10 | Severe | 100 |
| 14 | Art tri | 8 | D | - | - | 0 |
| 15 | Art tri | 3 | M | 0 | Severe | 100 |
| 16 | Art tri | 4 | M | 0 | Light | 80 |
| 17 | Art tri | 1 | M | 0 | Light | 100 |
| 18 | Art tri | 1 | M | 5 | Light | 100 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 5 | D | 0 | Moderate | 65 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 7 | M | 10 | Moderate | 100 |
| 24 | Art tri | 8 | D | - | - | 0 |
| 25 | Art tri | 2 | M | 5 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 27

T 1S R 99W S 24 Date: May 7, 1977

Aspect (degrees)____ Slope (degrees)____ Elevation (feet) 6520

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 6 | M | 10 | Severe | 90 |
| 2 | Art tri | 3 | M | 5 | Severe | 100 |
| 3 | Art tri | 2 | M | 0 | Moderate | 100 |
| 4 | Art tri | 2 | M | 10 | Moderate | 100 |
| 5 | Art tri | 3 | M | 10 | Severe | 100 |
| 6 | Art tri | 2 | M | 10 | Moderate | 100 |
| 7 | Art tri | 8 | D | - | - | 0 |
| 8 | Art tri | 6 | D | 5 | Severe | 75 |
| 9 | Art tri | 6 | D | 0 | Severe | 65 |
| 10 | Art tri | 3 | M | 5 | Severe | 100 |
| 11 | Art tri | 6 | D | 5 | Severe | 50 |
| 12 | Art tri | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 6 | D | 0 | Severe | 30 |
| 14 | Art tri | 3 | M | 0 | Severe | 100 |
| 15 | Art tri | 6 | D | 5 | Severe | 75 |
| 16 | Art tri | 5 | D | 0 | Moderate | 65 |
| 17 | Art tri | 1 | M | 0 | Light | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Art tri | 6 | D | 0 | Severe | 45 |
| 20 | Art tri | 6 | M | 0 | Severe | 85 |
| 21 | Art tri | 3 | M | 0 | Severe | 100 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 2 | M | 5 | Moderate | 100 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Art tri | 2 | M | 0 | Moderate | 85 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 28

T 2S R 99W S 4 Date: May 6, 1977

Aspect (degrees) SE Slope (degrees) 10 Elevation (feet) 7050

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 4 | M | 0 | Light | 85 |
| 2 | Art tri | 8 | D | - | - | 0 |
| 3 | Art tri | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 1 | M | 0 | Light | 100 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 1 | M | 0 | Light | 100 |
| 7 | Art tri | 5 | D | 0 | Moderate | 75 |
| 8 | Art tri | 4 | D | 0 | Light | 75 |
| 9 | Art tri | 1 | M | 0 | Light | 100 |
| 10 | Art tri | 8 | D | - | Light | 0 |
| 11 | Art tri | 8 | D | - | Moderate | 0 |
| 12 | Art tri | 1 | M | 0 | Light | 100 |
| 13 | Art tri | 4 | D | 5 | Light | 50 |
| 14 | Art tri | 2 | M | 0 | Moderate | 100 |
| 15 | Art tri | 4 | M | 0 | Light | 85 |
| 16 | Art tri | 4 | M | 10 | Light | 90 |
| 17 | Art tri | 4 | D | 0 | Light | 60 |
| 18 | Art tri | 1 | M | 0 | Light | 100 |
| 19 | Art tri | 8 | D | - | Light | 0 |
| 20 | Art tri | 4 | M | 5 | Light | 50 |
| 21 | Art tri | 8 | D | - | Light | 0 |
| 22 | Art tri | 1 | M | 0 | Light | 100 |
| 23 | Art tri | 1 | M | 5 | Light | 100 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 8 | D | - | - | 0 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 29

T 1S R 99W S 34 Date: May 7, 1977

Aspect (degrees) SW Slope (degrees) 1-2 Elevation (feet) 6700

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 1 | M | 15 | Light | 100 |
| 2 | Art tri | 2 | M | 0 | Moderate | 100 |
| 3 | Art tri | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 2 | M | 0 | Moderate | 100 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 2 | M | 25 | Moderate | 100 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 5 | Light | 100 |
| 9 | Art tri | 2 | M | 20 | Moderate | 100 |
| 10 | Art tri | 3 | M | 0 | Severe | 100 |
| 11 | Art tri | 1 | M | 0 | Light | 100 |
| 12 | Art tri | 2 | M | 0 | Moderate | 100 |
| 13 | Art tri | 2 | M | 10 | Moderate | 100 |
| 14 | Art tri | 1 | M | 5 | Light | 100 |
| 15 | Art tri | 1 | M | 40 | Light | 100 |
| 16 | Art tri | 1 | M | 25 | Light | 100 |
| 17 | Art tri | 2 | M | 10 | Moderate | 100 |
| 18 | Art tri | 1 | M | 5 | Light | 100 |
| 19 | Art tri | 2 | M | 30 | Moderate | 100 |
| 20 | Art tri | 1 | M | 10 | Light | 100 |
| 21 | Art tri | 5 | D | 10 | Moderate | 50 |
| 22 | Art tri | 6 | D | 20 | Severe | 50 |
| 23 | Art tri | 3 | M | 5 | Severe | 100 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Art tri | 3 | M | 5 | Severe | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 30

T 2S R 99W S 2 Date: May 7, 1977

Aspect (degrees) NW Slope (degrees) ____ Elevation (feet) 7020

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 2 | M | 0 | Moderate | 100 |
| 2 | Art tri | 3 | D | 25 | Severe | 70 |
| 3 | Art tri | 8 | D | - | Severe | 0 |
| 4 | Art tri | 2 | M | 45 | Moderate | 100 |
| 5 | Art tri | 2 | M | 30 | Moderate | 100 |
| 6 | Art tri | 6 | D | 80 | Severe | 50 |
| 7 | Art tri | 2 | M | 25 | Moderate | 100 |
| 8 | Art tri | 2 | M | 15 | Moderate | 100 |
| 9 | Art tri | 2 | M | 10 | Moderate | 100 |
| 10 | Art tri | 6 | D | 30 | Moderate | 25 |
| 11 | Art tri | 1 | M | 10 | Light | 100 |
| 12 | Art tri | 5 | D | 0 | Moderate | 50 |
| 13 | Art tri | 1 | M | 50 | Light | 100 |
| 14 | Art tri | 6 | D | 10 | Severe | 75 |
| 15 | Art tri | 2 | M | 5 | Moderate | 100 |
| 16 | Art tri | 2 | M | 0 | Moderate | 100 |
| 17 | Art tri | 1 | M | 40 | Light | 100 |
| 18 | Art tri | 6 | D | 15 | Severe | 35 |
| 19 | Art tri | 3 | M | 10 | Severe | 100 |
| 20 | Art tri | 6 | D | 0 | Severe | 10 |
| 21 | Art tri | 6 | M | 20 | Severe | 80 |
| 22 | Art tri | 1 | M | 15 | Light | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 1 | M | 75 | Light | 100 |
| 25 | Art tri | 1 | M | 35 | Light | 100 |

APPENDIX F

BROWSE RAW DATA

AUGUST 1977

## LIST OF ABBREVIATIONS FOR THE PLANT SPECIES SAMPLED IN THE BROWSE STUDIES

| ABBREVIATIONS | SCIENTIFIC NAME |
|---|---|
| ART TRI | *Artemisia tridentata* |
| PUR TRI | *Purshia tridentata* |
| CER MON | *Cercocarpus montanus* |
| JUN OST | *Juniperus osteosperma* |
| PIN EDU | *Pinus edulis* |
| AME UTA | *Amelanchier utahensis* |
| SYM ORE | *Symphoricarpos oreophilus* |

SYMBOL

Indicates that no estimates were made because the shrub was dead.

FORM CLASSES:

1. All available, little or no hedging
2. All available, moderately hedged
3. All available, severely hedged
4. Partially available, little or no hedging
5. Partially available, moderately hedged
6. Partially available, severely hedged
7. Unavailable
8. Dead

AGE CLASSES:

S - Seedling, less than 0.3 cm basal diameter
Y - Young, 0.3 to 0.6 cm basal diameter
M - Mature, over 0.6 cm basal diameter
D - Decandent, more than 25% of crown surface is dead

LEADER USE ESTIMATES:

Percent of twigs or leaders which are available and show use

HEDGING CLASSIFICATION:

Classification based upon the length and appearance (hedging_ of the previous year's growth (the two-year old wood).

1. None to light
2. Moderate
3. Severe

AVAILABILITY:

Visual estimate of the percent of the plant available to deer as browse, i.e., that portion less than six feet tall

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 1

T 1S R 99W S 31 Date: August 12, 1977

Aspect (degrees) N Slope (degrees) ______ Elevation (feet) 7400

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 2 | M | 5 | Light | 100 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Ame uta | 2 | M | 15 | Light | 100 |
| 4 | Art tri | 5 | D | 20 | Moderate | 50 |
| 5 | Ame uta | 2 | M | 25 | Moderate | 100 |
| 6 | Art tri | 1 | M | 5 | Light | 100 |
| 7 | Ame uta | 2 | M | 5 | Moderate | 100 |
| 8 | Ame uta | 4 | M | 0 | Light | 80 |
| 9 | Ame uta | 1 | M | 0 | Light | 100 |
| 10 | Art tri | 1 | M | 0 | Light | 100 |
| 11 | Ame uta | 2 | M | 10 | Moderate | 100 |
| 12 | Ame uta | 1 | M | 5 | Light | 100 |
| 13 | Ame uta | 2 | M | 5 | Moderate | 100 |
| 14 | Ame uta | 1 | Y | 0 | Light | 100 |
| 15 | Art tri | 1 | M | 20 | None | 100 |
| 16 | Ame uta | 1 | Y | 0 | None | 100 |
| 17 | Sym ore | 6 | D | 0 | Severe | 50 |
| 18 | Art tri | 5 | D | 0 | Moderate | 75 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Ame uta | 2 | M | 20 | Moderate | 100 |
| 21 | Ame uta | 1 | M | 5 | Light | 100 |
| 22 | Art tri | 2 | M | 10 | Moderate | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 1 | M | 5 | Light | 100 |
| 25 | Pin edu | 1 | M | 0 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 2

T 1S R 99W S 31 Date: August 12, 1977

Aspect (degrees) N Slope (degrees) Elevation (feet) 7440

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 1 | Y | 0 | None | 100 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Ame uta | 3 | M | 0 | Severe | 100 |
| 4 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 5 | Ame uta | 3 | M | 10 | Severe | 100 |
| 6 | Sym ore | 1 | M | 0 | Light | 100 |
| 7 | Ame uta | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 5 | None | 80 |
| 9 | Ame uta | 2 | M | 0 | Moderate | 100 |
| 10 | Ame uta | 1 | Y | 0 | Light | 100 |
| 11 | Ame uta | 1 | Y | 0 | Light | 100 |
| 12 | Ame uta | 6 | D | 0 | Severe | 50 |
| 13 | Sym ore | 1 | M | 0 | Light | 100 |
| 14 | Art tri | 4 | D | 5 | Light | 30 |
| 15 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 16 | Ame uta | 3 | M | 15 | Severe | 100 |
| 17 | Sym ore | 1 | M | 25 | None | 100 |
| 18 | Ame uta | 3 | M | 5 | Severe | 90 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Ame uta | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 1 | M | 0 | Light | 100 |
| 22 | Ame uta | 3 | M | 15 | Severe | 100 |
| 23 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 24 | Ame uta | 3 | M | 20 | Severe | 100 |
| 25 | Art tri | 2 | M | 0 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 3

T 1S R 99W S 31 Date: August 12, 1977

Aspect (degrees) N Slope (degrees) 30 Elevation (feet) 7520

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 3 | M | 0 | Severe | 100 |
| 2 | Sym ore | 2 | M | 10 | Moderate | 100 |
| 3 | Art tri | 4 | D | 20 | Light | 50 |
| 4 | Art tri | 4 | D | 0 | Light | 10 |
| 5 | Art tri | 2 | M | 0 | Moderate | 100 |
| 6 | Sym ore | 2 | Y | 0 | Moderate | 100 |
| 7 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 8 | Art tri | 3 | M | 10 | Severe | 100 |
| 9 | Art tri | 1 | M | 0 | Light | 100 |
| 10 | Art tri | 1 | M | 0 | Light | 100 |
| 11 | Sym ore | 1 | M | 0 | Light | 100 |
| 12 | Ame uta | 2 | M | 0 | Moderate | 100 |
| 13 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 2 | M | 20 | Moderate | 100 |
| 16 | Ame uta | 2 | M | 0 | Moderate | 100 |
| 17 | Art tri | 2 | M | 35 | Moderate | 100 |
| 18 | Art tri | 3 | M | 5 | Severe | 100 |
| 19 | Ame uta | 6 | D | 0 | Severe | 100 |
| 20 | Art tri | 5 | D | 5 | Moderate | 35 |
| 21 | Art tri | 2 | Y | 0 | Moderate | 100 |
| 22 | Ame uta | 1 | M | 0 | Light | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Ame uta | 3 | M | 0 | Severe | 100 |
| 25 | Sym ore | 2 | M | 0 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 4

T 1S R 99W S 31 Date: August 12, 1977

Aspect (degrees) N Slope (degrees) 10 Elevation (feet) 7600

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 3 | M | 0 | Severe | 100 |
| 2 | Sym ore | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 6 | D | 0 | Severe | 20 |
| 4 | Sym ore | 1 | Y | 0 | Light | 100 |
| 5 | Ame uta | 3 | M | 0 | Severe | 100 |
| 6 | Art tri | 2 | M | 10 | Moderate | 100 |
| 7 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 8 | Art tri | 2 | M | 0 | Moderate | 100 |
| 9 | Sym ore | 5 | D | 0 | Moderate | 20 |
| 10 | Art tri | 2 | M | 0 | Moderate | 100 |
| 11 | Art tri | 8 | D | - | - | 0 |
| 12 | Art tri | 1 | Y | 0 | Light | 100 |
| 13 | Art tri | 2 | Y | 0 | Moderate | 100 |
| 14 | Sym ore | 2 | M | 100 | Moderate | 100 |
| 15 | Ame uta | 2 | M | 10 | Moderate | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 100 |
| 17 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Ame uta | 3 | M | 0 | Severe | 100 |
| 20 | Sym ore | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 1 | M | 0 | Light | 100 |
| 23 | Ame uta | 1 | M | 65 | Light | 100 |
| 24 | Ame uta | 1 | M | 40 | Light | 100 |
| 25 | Ame uta | 5 | D | 25 | Moderate | 50 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 5

T 2S R 99W S 4 Date: August 14, 1977

Aspect (degrees) N Slope (degrees) 5 Elevation (feet) 7000

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 2 | Pur tri | 6 | D | 0 | Severe | 30 |
| 3 | Pur tri | 2 | M | 40 | Moderate | 100 |
| 4 | Pin edu | 1 | Y | 0 | Light | 100 |
| 5 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 6 | Pur tri | 8 | D | - | - | 0 |
| 7 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 8 | Pin edu | 1 | M | 0 | Light | 100 |
| 9 | Pur tri | 6 | D | 10 | Severe | 40 |
| 10 | Art tri | 8 | D | - | Severe | 0 |
| 11 | Pin edu | 1 | M | 0 | Light | 100 |
| 12 | Pin edu | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 6 | D | 0 | Severe | 50 |
| 14 | Jun ost | 3 | M | 0 | Severe | 100 |
| 15 | Art tri | 3 | M | 0 | Severe | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 100 |
| 17 | Pin edu | 8 | D | - | - | 0 |
| 18 | Pin edu | 1 | S | 0 | Light | 100 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Pin edu | 4 | M | 0 | Light | 20 |
| 21 | Art tri | 1 | M | 0 | Light | 100 |
| 22 | Sym ore | 6 | D | 0 | Severe | 20 |
| 23 | Jun ost | 2 | M | 0 | Moderate | 100 |
| 24 | Jun ost | 2 | M | 0 | Moderate | 100 |
| 25 | Pin edu | 1 | Y | 0 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Mixed Brush Sample Unit #: 6

T 2S R 99W S 6 Date: August 12, 1977

Aspect (degrees) S Slope (degrees) 30 Elevation (feet) 7440

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Ame uta | 3 | M | 5 | Severe | 100 |
| 2 | Ame uta | 3 | M | 5 | Severe | 100 |
| 3 | Pin edu | 2 | M | 5 | Moderate | 100 |
| 4 | Sym ore | 3 | M | 0 | Severe | 100 |
| 5 | Pin edu | 4 | M | 10 | Light | 30 |
| 6 | Ame uta | 8 | D | - | Severe | 0 |
| 7 | Ame uta | 3 | M | 5 | Severe | 80 |
| 8 | Sym ore | 1 | Y | 0 | Light | 100 |
| 9 | Cer mon | 3 | M | 20 | Severe | 90 |
| 10 | Ame uta | 3 | M | 5 | Severe | 100 |
| 11 | Cer mon | 3 | M | 20 | Severe | 100 |
| 12 | Ame uta | 6 | D | 0 | Severe | 35 |
| 13 | Ame uta | 2 | M | 10 | Moderate | 100 |
| 14 | Ame uta | 5 | D | 0 | Moderate | 5 |
| 15 | Ame uta | 2 | M | 0 | Moderate | 100 |
| 16 | Cer mon | 2 | M | 40 | Moderate | 100 |
| 17 | Cer mon | 2 | M | 15 | Moderate | 100 |
| 18 | Ame uta | 2 | M | 5 | Moderate | 100 |
| 19 | Cer mon | 2 | M | 15 | Moderate | 100 |
| 20 | Ame uta | 2 | M | 5 | Moderate | 80 |
| 21 | Cer mon | 2 | M | 10 | Moderate | 100 |
| 22 | Cer mon | 3 | M | 40 | Severe | 100 |
| 23 | Cer mon | 3 | M | 5 | Severe | 100 |
| 24 | Cer mon | 2 | M | 5 | Moderate | 100 |
| 25 | Cer mon | 5 | D | 5 | Moderate | 40 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 7

T 2S R 99W S 4 Date: August 13, 1977

Aspect (degrees) S Slope (degrees) 30 Elevation (feet) 7000

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 4 | M | 0 | Light | 50 |
| 2 | Art tri | 6 | D | 0 | Severe | 30 |
| 3 | Art tri | 5 | D | 0 | Moderate | 20 |
| 4 | Art tri | 6 | D | 0 | Severe | 50 |
| 5 | Pin edu | 4 | M | 0 | Light | 60 |
| 6 | Jun ost | 4 | D | 0 | Light | 20 |
| 7 | Art tri | 3 | M | 0 | Severe | 100 |
| 8 | Art tri | 3 | M | 0 | Severe | 100 |
| 9 | Art tri | 3 | M | 10 | Severe | 100 |
| 10 | Art tri | 1 | M | 0 | Light | 100 |
| 11 | Pin edu | 4 | M | 0 | Light | 30 |
| 12 | Art tri | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 1 | M | 0 | Light | 100 |
| 14 | Jun ost | 8 | D | - | - | 0 |
| 15 | Art tri | 3 | M | 0 | Severe | 100 |
| 16 | Art tri | 2 | M | 0 | Moderate | 100 |
| 17 | Art tri | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 2 | M | 0 | Moderate | 100 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Pin edu | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 6 | D | 0 | Severe | 50 |
| 22 | Pin edu | 4 | M | 0 | Light | 80 |
| 23 | Pin edu | 4 | M | 0 | Light | 80 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Jun ost | 4 | M | 0 | Light | 80 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 8

T 2S R 99W S 4 Date: August 13, 1977

Aspect (degrees) N Slope (degrees) 60 Elevation (feet) 7120

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 3 | M | 0 | Severe | 100 |
| 2 | Ame uta | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 6 | D | 0 | Severe | 50 |
| 4 | Art tri | 6 | M | 0 | Severe | 80 |
| 5 | Art tri | 6 | D | 0 | Severe | 50 |
| 6 | Art tri | 6 | D | 0 | Severe | 15 |
| 7 | Art tri | 5 | D | 0 | Moderate | 20 |
| 8 | Art tri | 8 | D | - | - | 0 |
| 9 | Sym ore | 3 | M | 0 | Severe | 100 |
| 10 | Art tri | 6 | D | 0 | Severe | 20 |
| 11 | Art tri | 5 | D | 0 | Moderate | 75 |
| 12 | Art tri | 6 | D | 0 | Severe | 50 |
| 13 | Ame uta | 2 | M | 10 | Moderate | 100 |
| 14 | Art tri | 3 | M | 0 | Severe | 100 |
| 15 | Art tri | 8 | D | - | - | 0 |
| 16 | Art tri | 6 | M | 0 | Severe | 90 |
| 17 | Sym ore | 5 | D | 0 | Moderate | 5 |
| 18 | Sym ore | 5 | D | 0 | Moderate | 5 |
| 19 | Sym ore | 5 | D | 0 | Moderate | 10 |
| 20 | Ame uta | 1 | Y | 0 | None | 100 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Art tri | 3 | M | 0 | Severe | 100 |
| 23 | Art tri | 3 | M | 5 | Severe | 100 |
| 24 | Art tri | 6 | M | 0 | Severe | 90 |
| 25 | Art tri | 6 | D | 0 | Severe | 50 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 9

T 2S R 99W S 4 Date: August 13, 1977

Aspect (degrees) N Slope (degrees) 10-15 Elevation (feet) 7080

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 5 | D | 0 | Moderate | 25 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 1 | Y | 0 | None | 100 |
| 4 | Art tri | 8 | D | - | - | 0 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 8 | D | - | - | 0 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 2 | M | 0 | Moderate | 100 |
| 10 | Art tri | 5 | D | 0 | Moderate | 10 |
| 11 | Art tri | 1 | M | 0 | Light | 100 |
| 12 | Art tri | 1 | M | 0 | Light | 100 |
| 13 | Art tri | 8 | D | - | - | 0 |
| 14 | Sym ore | 4 | D | 0 | Light | 20 |
| 15 | Art tri | 5 | D | 0 | Moderate | 60 |
| 16 | Art tri | 8 | D | - | Severe | 0 |
| 17 | Art tri | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Art tri | 4 | D | 30 | Light | 50 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 8 | D | - | - | 0 |
| 25 | Art tri | 1 | Y | 0 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush  Sample Unit #: 10

T 2S  R 99W  S 4  Date: August 14, 1977

Aspect (degrees) N  Slope (degrees) 0-5  Elevation (feet) 7040

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 1 | M | 2 | Light | 100 |
| 2 | Art tri | 8 | D | - | - | 0 |
| 3 | Art tri | 15 | D | - | Moderate | 0 |
| 4 | Art tri | 5 | D | 0 | Moderate | 40 |
| 5 | Art tri | 5 | D | 0 | Moderate | 60 |
| 6 | Art tri | 2 | M | 0 | Moderate | 100 |
| 7 | Art tri | 6 | D | 2 | Severe | 75 |
| 8 | Art tri | 6 | D | 0 | Severe | 45 |
| 9 | Art tri | 8 | D | - | Moderate | 0 |
| 10 | Art tri | 2 | M | 0 | Moderate | 100 |
| 11 | Art tri | 2 | M | 0 | Moderate | 100 |
| 12 | Art tri | 5 | M | 5 | Moderate | 80 |
| 13 | Art tri | 8 | D | - | Moderate | 0 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 4 | D | 0 | Light | 60 |
| 16 | Art tri | 8 | D | - | - | 0 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 2 | M | 0 | Moderate | 100 |
| 19 | Art tri | 8 | D | - | Moderate | 0 |
| 20 | Art tri | 8 | D | - | Light | 0 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 5 | D | 0 | Moderate | 35 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 6 | D | 0 | Severe | 40 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 11

T 2S R 99W S 4 Date: August 14, 1977

Aspect (degrees) S Slope (degrees) Elevation (feet) 7080

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 4 | M | 0 | Light | 10 |
| 2 | Pin edu | 5 | M | 5 | Moderate | 20 |
| 3 | Pur tri | 8 | D | - | - | 0 |
| 4 | Pur tri | 2 | M | 5 | Moderate | 100 |
| 5 | Pur tri | 3 | M | 20 | Severe | 100 |
| 6 | Pur tri | 3 | M | 5 | Moderate | 100 |
| 7 | Jun ost | 1 | M | 5 | Light | 100 |
| 8 | Pin edu | 5 | M | 0 | Moderate | 30 |
| 9 | Pin edu | 5 | M | 0 | Moderate | 75 |
| 10 | Jun ost | 5 | M | 0 | Moderate | 20 |
| 11 | Pur tri | 3 | M | 5 | Severe | 100 |
| 12 | Pur tri | 3 | M | 0 | Severe | 100 |
| 13 | Pur tri | 3 | M | 0 | Severe | 100 |
| 14 | Pur tri | 3 | M | 0 | Severe | 100 |
| 15 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 16 | Pin edu | 3 | M | 0 | Severe | 100 |
| 17 | Jun ost | 5 | M | 0 | Moderate | 15 |
| 18 | Pur tri | 2 | M | 5 | Moderate | 85 |
| 19 | Pin edu | 1 | M | 0 | Light | 100 |
| 20 | Pur tri | 2 | M | 0 | Moderate | 100 |
| 21 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 22 | Pur tri | 6 | D | 25 | Severe | 50 |
| 23 | Pin edu | 1 | Y | 0 | Light | 100 |
| 24 | Jun ost | 4 | M | 0 | Light | 5 |
| 25 | Pur tri | 8 | D | - | - | 0 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 12

T 1S R 99W S 34 Date: August 14, 1977

Aspect (degrees) NE Slope (degrees) < 5 Elevation (feet) 6800

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 7 | M | - | Moderate | 0 |
| 2 | Cer mon | 8 | D | - | Severe | 0 |
| 3 | Cer mon | 3 | M | 80 | Severe | 100 |
| 4 | Pur tri | 2 | M | 10 | Moderate | 100 |
| 5 | Ame uta | 6 | M | 10 | Severe | 80 |
| 6 | Cer mon | 6 | M | 10 | Severe | 90 |
| 7 | Pin edu | 7 | M | - | Moderate | 0 |
| 8 | Pin edu | 5 | M | 0 | Moderate | 10 |
| 9 | Art tri | 4 | D | 0 | Light | 20 |
| 10 | Cer mon | 6 | M | 10 | Severe | 80 |
| 11 | Art tri | 4 | D | 0 | Light | 40 |
| 12 | Cer mon | 6 | D | 0 | Severe | 25 |
| 13 | Jun ost | 1 | M | 0 | Light | 10 |
| 14 | Art tri | 5 | M | 0 | Moderate | 80 |
| 15 | Pin edu | 5 | M | 6 | Moderate | 15 |
| 16 | Pin edu | 7 | M | - | Moderate | 0 |
| 17 | Pin edu | 7 | M | - | Light | 0 |
| 18 | Jun ost | 8 | D | - | - | 0 |
| 19 | Art tri | 2 | M | 75 | Moderate | 100 |
| 20 | Pin edu | 6 | M | 0 | Severe | 15 |
| 21 | Cer mon | 8 | D | - | Severe | 0 |
| 22 | Cer mon | 3 | M | 10 | Severe | 100 |
| 23 | Cer mon | 3 | M | 15 | Severe | 100 |
| 24 | Pin edu | 1 | S | 0 | None | 100 |
| 25 | Cer mon | 3 | M | 10 | Severe | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 13

T 1S R 99W S 34 Date: August 14, 1977

Aspect (degrees) E Slope (degrees) 1 Elevation (feet) 6600

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 8 | D | - | - | 0 |
| 2 | Art tri | 4 | M | 0 | Light | 35 |
| 3 | Art tri | 4 | D | 0 | Light | 50 |
| 4 | Art tri | 1 | M | 0 | None | 100 |
| 5 | Art tri | 1 | M | 0 | None | 100 |
| 6 | Art tri | 8 | D | - | - | 0 |
| 7 | Art tri | 4 | D | 0 | Light | 25 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 8 | D | - | Light | 0 |
| 10 | Art tri | 1 | M | 0 | Light | 100 |
| 11 | Art tri | 8 | D | - | None | 0 |
| 12 | Art tri | 4 | D | 0 | None | 25 |
| 13 | Art tri | 1 | M | 0 | None | 100 |
| 14 | Art tri | 4 | D | 0 | None | 20 |
| 15 | Art tri | 8 | D | - | None | 0 |
| 16 | Art tri | 1 | M | 0 | None | 100 |
| 17 | Art tri | 1 | M | 0 | None | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Art tri | 4 | D | 0 | Light | 50 |
| 20 | Art tri | 4 | M | 0 | None | 90 |
| 21 | Art tri | 8 | D | - | Light | 0 |
| 22 | Art tri | 1 | M | 0 | None | 100 |
| 23 | Art tri | 1 | M | 0 | None | 100 |
| 24 | Art tri | 4 | M | 0 | None | 80 |
| 25 | Art tri | 4 | M | 0 | None | 80 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 14

T 1S R 99W S 33 Date: August 14, 1977

Aspect (degrees) SE Slope (degrees) 15 Elevation (feet) 6820

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 1 | M | 0 | Light | 100 |
| 2 | Art tri | 1 | M | 0 | None | 100 |
| 3 | Art tri | 5 | D | 0 | Moderate | 35 |
| 4 | Art tri | 1 | M | 0 | Light | 100 |
| 5 | Art tri | 3 | M | 0 | Severe | 100 |
| 6 | Art tri | 8 | D | - | Moderate | 0 |
| 7 | Art tri | 4 | M | 0 | Light | 80 |
| 8 | Art tri | 1 | M | 0 | None | 100 |
| 9 | Art tri | 8 | D | - | Moderate | 0 |
| 10 | Art tri | 5 | D | | Moderate | 30 |
| 11 | Art tri | 1 | M | 0 | None | 100 |
| 12 | Art tri | 8 | D | - | Severe | 0 |
| 13 | Art tri | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 2 | M | 0 | Moderate | 50 |
| 16 | Art tri | 1 | M | 0 | None | 100 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 1 | M | 0 | Light | 100 |
| 19 | Art tri | 1 | M | 0 | Light | 90 |
| 20 | Art tri | 1 | M | 0 | None | 100 |
| 21 | Art tri | 1 | M | 0 | None | 100 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 5 | D | 0 | Moderate | 20 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 2 | M | 0 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 15

T 2S R 99W S 5 Date: August 14, 1977

Aspect (degrees) S Slope (degrees) 10-15 Elevation (feet) 7040

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 5 | M | 0 | Moderate | 90 |
| 2 | Art tri | 2 | M | 0 | Moderate | 100 |
| 3 | Art tri | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 1 | M | 0 | None | 100 |
| 5 | Art tri | 5 | D | 0 | Moderate | 50 |
| 6 | Art tri | 5 | D | 0 | Moderate | 50 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 8 | D | - | Light | 0 |
| 10 | Art tri | 8 | D | - | - | 0 |
| 11 | Art tri | 4 | D | 0 | Light | 40 |
| 12 | Art tri | 1 | M | 0 | Light | 100 |
| 13 | Art tri | 5 | D | 0 | Moderate | 75 |
| 14 | Art tri | 8 | D | - | - | 0 |
| 15 | Art tri | 2 | M | 0 | Moderate | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 100 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 8 | D | - | Light | 0 |
| 19 | Art tri | 5 | M | 0 | Moderate | 90 |
| 20 | Art tri | 2 | M | 0 | Moderate | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 4 | M | 0 | None | 90 |
| 24 | Art tri | 1 | M | 0 | None | 100 |
| 25 | Art tri | 1 | M | 0 | None | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 16

T 2S R 99W S 2 Date: August 16, 1977

Aspect (degrees) E Slope (degrees) 40 Elevation (feet) 6880

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Pin edu | 4 | M | 0 | Light | 40 |
| 2 | Pin edu | 2 | M | 5 | Moderate | 100 |
| 3 | Art tri | 4 | D | 0 | Light | 50 |
| 4 | Jun ost | 4 | M | 0 | Light | 30 |
| 5 | Art tri | 4 | D | 0 | Light | 15 |
| 6 | Pin edu | 1 | S | 0 | None | 100 |
| 7 | Jun ost | 8 | D | - | - | 0 |
| 8 | Pin edu | 1 | S | 0 | None | 100 |
| 9 | Art tri | 8 | D | - | Light | 0 |
| 10 | Art tri | 2 | M | 0 | Moderate | 100 |
| 11 | Jun ost | 5 | M | 0 | Moderate | 5 |
| 12 | Jun ost | 8 | D | - | - | 0 |
| 13 | Art tri | 4 | D | 0 | Light | 50 |
| 14 | Sym ore | 3 | M | 0 | Severe | 100 |
| 15 | Sym ore | 3 | M | 0 | Severe | 100 |
| 16 | Sym ore | 3 | D | 30 | Severe | 75 |
| 17 | Sym ore | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 6 | M | 0 | Severe | 80 |
| 19 | Art tri | 4 | D | 0 | Light | 50 |
| 20 | Pur tri | 6 | D | 20 | Severe | 30 |
| 21 | Art tri | 8 | D | - | - | 0 |
| 22 | Pin edu | 4 | M | 0 | Light | 40 |
| 23 | Jun ost | 1 | M | 0 | Light | 100 |
| 24 | Art tri | 8 | D | - | Severe | 0 |
| 25 | Cer mon | 6 | M | 10 | Severe | 80 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 17

T 2S R 99W S 3 Date: August 16, 1977

Aspect (degrees) NW Slope (degrees) 15 Elevation (feet) 6950

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 5 | M | 0 | Moderate | 20 |
| 2 | Art tri | 1 | M | 25 | Light | 100 |
| 3 | Art tri | 2 | M | 15 | Moderate | 100 |
| 4 | Art tri | 5 | D | 25 | Moderate | 50 |
| 5 | Art tri | 2 | M | 10 | Moderate | 100 |
| 6 | Art tri | 2 | M | 15 | Moderate | 100 |
| 7 | Art tri | 6 | D | 90 | Severe | 20 |
| 8 | Art tri | 1 | S | 75 | Light | 100 |
| 9 | Cer mon | 6 | D | 0 | Severe | 40 |
| 10 | Cer mon | 6 | M | 25 | Severe | 85 |
| 11 | Pin edu | 1 | Y | 0 | Light | 100 |
| 12 | Cer mon | 3 | M | 5 | Severe | 100 |
| 13 | Cer mon | 3 | M | 0 | Severe | 100 |
| 14 | Jun ost | 7 | M | - | Moderate | 0 |
| 15 | Jun ost | 6 | M | 0 | Severe | 10 |
| 16 | Jun ost | 8 | D | - | - | 0 |
| 17 | Art tri | 6 | D | 10 | Severe | 60 |
| 18 | Art tri | 3 | M | 50 | Severe | 100 |
| 19 | Art tri | 8 | D | - | Severe | 0 |
| 20 | Art tri | 3 | M | 35 | Severe | 100 |
| 21 | Pur tri | 8 | D | - | Moderate | 0 |
| 22 | Cer mon | 6 | M | 5 | Severe | 80 |
| 23 | Cer mon | 5 | M | 0 | Moderate | 90 |
| 24 | Art tri | 6 | D | 40 | Severe | 60 |
| 25 | Cer mon | 5 | M | 35 | Moderate | 90 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 18

T 2S R 99W S 10 Date: August 16, 1977

Aspect (degrees) SE Slope (degrees) 1 Elevation (feet) 7100

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 7 | M | - | None | 0 |
| 2 | Pin edu | 3 | M | 0 | Severe | 100 |
| 3 | Art tri | 8 | D | - | - | 0 |
| 4 | Pin edu | 3 | M | 50 | Severe | 100 |
| 5 | Art tri | 8 | D | - | - | 0 |
| 6 | Jun ost | 4 | M | 0 | Light | 5 |
| 7 | Pin edu | 5 | M | 0 | Moderate | 5 |
| 8 | Art tri | 1 | M | 15 | Light | 100 |
| 9 | Pur tri | 5 | M | 10 | Moderate | 80 |
| 10 | Pur tri | 1 | M | 0 | Light | 100 |
| 11 | Pur tri | 5 | D | 0 | Moderate | 40 |
| 12 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 13 | Pur tri | 2 | M | 10 | Moderate | 100 |
| 14 | Jun ost | 7 | M | 0 | Light | 15 |
| 15 | Pur tri | 8 | D | - | - | 0 |
| 16 | Jun ost | 5 | M | 0 | Moderate | 25 |
| 17 | Pur tri | 2 | M | 0 | Moderate | 100 |
| 18 | Pur tri | 5 | D | 0 | Moderate | 20 |
| 19 | Pur tri | 3 | M | 0 | Severe | 100 |
| 20 | Pur tri | 2 | M | 0 | Moderate | 100 |
| 21 | Pur tri | 3 | M | 0 | Severe | 100 |
| 22 | Pur tri | 2 | M | 0 | Moderate | 100 |
| 23 | Pur tri | 2 | M | 0 | Moderate | 100 |
| 24 | Pur tri | 3 | M | 0 | Severe | 100 |
| 25 | Jun ost | 5 | M | 0 | Moderate | 20 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 19

T 2S R 99W S 9 Date: August 16, 1977

Aspect (degrees) SE Slope (degrees) 1 Elevation (feet) 7340

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 4 | D | 5 | Light | 60 |
| 2 | Pur tri | 5 | D | 0 | Moderate | 30 |
| 3 | Pin edu | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 1 | M | 0 | Light | 100 |
| 5 | Jun ost | 4 | M | 0 | Light | 50 |
| 6 | Jun ost | 4 | M | 0 | Light | 50 |
| 7 | Pin edu | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 2 | M | 0 | Moderate | 100 |
| 9 | Art tri | 2 | M | 0 | Moderate | 100 |
| 10 | Pin edu | 4 | M | 0 | Light | 60 |
| 11 | Jun ost | 4 | M | 0 | Light | 75 |
| 12 | Pin edu | 4 | M | 0 | Light | 15 |
| 13 | Art tri | 3 | M | 0 | Severe | 100 |
| 14 | Art tri | 3 | M | 0 | Severe | 100 |
| 15 | Jun ost | 1 | M | 0 | Light | 100 |
| 16 | Pin edu | 3 | M | 0 | Severe | 100 |
| 17 | Art tri | 2 | M | 40 | Moderate | 100 |
| 18 | Art tri | 2 | M | 0 | Moderate | 100 |
| 19 | Art tri | 1 | M | 80 | Light | 100 |
| 20 | Art tri | 8 | D | - | - | 0 |
| 21 | Art tri | 4 | D | 0 | Light | 30 |
| 22 | Art tri | 6 | D | 30 | Severe | 20 |
| 23 | Art tri | 6 | D | 0 | Severe | 35 |
| 24 | Art tri | 5 | D | 5 | Moderate | 75 |
| 25 | Pin edu | 3 | M | 0 | Severe | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 20

T 2S R 99W S 9 Date: August 16, 1977

Aspect (degrees) SW Slope (degrees) 50 Elevation (feet) 7200

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 3 | M | 0 | Severe | 100 |
| 2 | Art tri | 2 | M | 0 | Moderate | 100 |
| 3 | Art tri | 6 | D | 0 | Severe | 75 |
| 4 | Art tri | 3 | M | 0 | Severe | 100 |
| 5 | Ame uta | 1 | S | 0 | None | 100 |
| 6 | Art tri | 6 | D | 0 | Severe | 50 |
| 7 | Art tri | 8 | D | - | - | 0 |
| 8 | Art tri | 8 | D | - | - | 0 |
| 9 | Art tri | 2 | M | 0 | Moderate | 100 |
| 10 | Art tri | 6 | D | 0 | Severe | 65 |
| 11 | Art tri | 3 | M | 5 | Severe | 100 |
| 12 | Art tri | 8 | D | - | Severe | 0 |
| 13 | Art tri | 6 | D | 0 | Severe | 75 |
| 14 | Art tri | 6 | M | 0 | Severe | 90 |
| 15 | Art tri | 6 | D | 0 | Severe | 50 |
| 16 | Art tri | 2 | M | 40 | Moderate | 100 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Art tri | 6 | D | 0 | Severe | 50 |
| 19 | Art tri | 8 | D | - | - | 0 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 6 | D | 5 | Severe | 50 |
| 23 | Art tri | 6 | D | 0 | Severe | 75 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 1 | M | 0 | Light | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 21

T 2S R 99W S 9 Date: August 16, 1977

Aspect (degrees) W Slope (degrees) 20 Elevation (feet) 7200

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 3 | M | 0 | Severe | 100 |
| 2 | Art tri | 6 | M | 10 | Severe | 80 |
| 3 | Art tri | 5 | M | 20 | Moderate | 80 |
| 4 | Art tri | 5 | M | 0 | Moderate | 60 |
| 5 | Art tri | 6 | M | 0 | Severe | 80 |
| 6 | Pin edu | 2 | M | 0 | Moderate | 100 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 3 | M | 0 | Severe | 100 |
| 9 | Art tri | 6 | D | 0 | Severe | 75 |
| 10 | Art tri | 6 | D | 0 | Severe | 20 |
| 11 | Art tri | 6 | M | 0 | Severe | 80 |
| 12 | Art tri | 6 | D | 0 | Severe | 15 |
| 13 | Art tri | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 6 | M | 0 | Severe | 80 |
| 15 | Art tri | 3 | M | 0 | Severe | 100 |
| 16 | Art tri | 3 | M | 0 | Severe | 80 |
| 17 | Art tri | 6 | D | 0 | Severe | 45 |
| 18 | Art tri | 6 | D | 0 | Severe | 75 |
| 19 | Art tri | 6 | D | 0 | Severe | 50 |
| 20 | Art tri | 6 | D | 0 | Severe | 65 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 6 | D | 0 | Severe | 50 |
| 23 | Pin edu | 1 | M | 0 | Light | 100 |
| 24 | Art tri | 2 | M | 0 | Moderate | 100 |
| 25 | Art tri | 6 | M | 0 | Severe | 90 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 22

T 2S R 99W S 17 Date: August 16, 1977

Aspect (degrees) E Slope (degrees) 7-8 Elevation (feet) 7300

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 2 | M | 5 | Moderate | 100 |
| 2 | Art tri | 6 | D | 0 | Severe | 50 |
| 3 | Art tri | 2 | M | 0 | Moderate | 100 |
| 4 | Art tri | 8 | D | - | Moderate | 0 |
| 5 | Ame uta | 2 | M | 0 | Light | 100 |
| 6 | Art tri | 5 | M | 0 | Moderate | 90 |
| 7 | Ame uta | 8 | D | - | None | 0 |
| 8 | Art tri | 6 | D | 0 | Severe | 50 |
| 9 | Art tri | 8 | D | - | - | 0 |
| 10 | Art tri | 6 | D | 0 | Severe | 60 |
| 11 | Art tri | 2 | M | 5 | Moderate | 100 |
| 12 | Art tri | 8 | D | - | - | 0 |
| 13 | Art tri | 5 | D | 0 | Moderate | 25 |
| 14 | Art tri | 5 | D | 30 | Moderate | 30 |
| 15 | Ame uta | 1 | M | 0 | Light | 100 |
| 16 | Art tri | 1 | M | 0 | Light | 90 |
| 17 | Art tri | 8 | D | - | - | 0 |
| 18 | Ame uta | 1 | M | 0 | Light | 100 |
| 19 | Art tri | 4 | M | 20 | Light | 90 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 6 | D | 0 | Severe | 10 |
| 22 | Art tri | 3 | M | 20 | Severe | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 6 | D | 0 | Severe | 60 |
| 25 | Art tri | 2 | M | 20 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 23

T 1S R 99W S 13 Date: August 16, 1977

Aspect (degrees) NE Slope (degrees) 2-3 Elevation (feet) 6600

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 1 | M | 0 | Light | 100 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 1 | Y | 0 | None | 100 |
| 4 | Art tri | 1 | Y | 0 | None | 100 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 1 | M | 0 | Light | 100 |
| 7 | Art tri | 5 | D | 0 | Moderate | 20 |
| 8 | Art tri | 8 | D | - | Moderate | 0 |
| 9 | Art tro | 3 | M | 0 | Severe | 100 |
| 10 | Art tri | 5 | D | 0 | Moderate | 75 |
| 11 | Art tri | 6 | D | 0 | Severe | 65 |
| 12 | Art tri | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 5 | M | 0 | Moderate | 90 |
| 14 | Art tri | 2 | M | 0 | Moderate | 100 |
| 15 | Art tri | 6 | D | 20 | Severe | 50 |
| 16 | Jun ost | 4 | M | 0 | Light | 10 |
| 17 | Art tri | 5 | D | 0 | Moderate | 20 |
| 18 | Art tri | 8 | D | - | Severe | 0 |
| 19 | Art tri | 8 | D | - | - | 0 |
| 20 | Art tri | 2 | M | 0 | Moderate | 100 |
| 21 | Art tri | 3 | M | 0 | Severe | 100 |
| 22 | Art tri | 8 | D | - | - | 0 |
| 23 | Art tri | 8 | D | 0 | Severe | 0 |
| 24 | Art tri | 4 | M | 0 | Light | 80 |
| 25 | Jun ost | 4 | M | 0 | Light | 15 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 24

T 1S R 99W S 13 Date: August 15, 1977

Aspect (degrees) E Slope (degrees) 1-2 Elevation (feet) 6640

Field Analyst(s): C. V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 5 | D | 0 | Moderate | 75 |
| 2 | Art tri | 1 | M | 0 | Light | 100 |
| 3 | Art tri | 2 | M | 0 | Moderate | 100 |
| 4 | Art tri | 3 | M | 0 | Severe | 100 |
| 5 | Art tri | 2 | M | 0 | Moderate | 100 |
| 6 | Art tri | 6 | D | 5 | Severe | 60 |
| 7 | Art tri | 6 | D | 0 | Severe | 25 |
| 8 | Art tri | 5 | M | 0 | Light | 95 |
| 9 | Art tri | 5 | D | 0 | Moderate | 50 |
| 10 | Art tri | 8 | D | - | - | 0 |
| 11 | Art tri | 8 | D | - | Moderate | 0 |
| 12 | Art tri | 5 | D | 0 | Moderate | 75 |
| 13 | Art tri | 5 | D | 0 | Moderate | 50 |
| 14 | Art tri | 2 | M | 0 | Moderate | 100 |
| 15 | Art tri | 8 | D | - | - | 0 |
| 16 | Art tri | 8 | D | - | Severe | 0 |
| 17 | Art tri | 8 | D | - | Severe | 0 |
| 18 | Art tri | 6 | D | 0 | Severe | 60 |
| 19 | Art tri | 8 | D | - | - | 0 |
| 20 | Art tri | 2 | M | 0 | Moderate | 100 |
| 21 | Art tri | 1 | M | 0 | Light | 100 |
| 22 | Art tri | 8 | D | - | - | 0 |
| 23 | Art tri | 3 | M | 0 | Severe | 100 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Art tri | 2 | M | 5 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Pinyon - Juniper Sample Unit #: 25

T 1S R 99W S 13 Date: August 15, 1977

Aspect (degrees)____ Slope (degrees)____ Elevation (feet) 6640

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Jun ost | 4 | M | 0 | Light | 75 |
| 2 | Jun ost | 4 | D | 0 | Light | 50 |
| 3 | Jun ost | 3 | M | 0 | Severe | 85 |
| 4 | Art tri | 6 | D | 0 | Severe | 75 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 6 | D | 0 | Severe | 60 |
| 7 | Art tri | 6 | D | 5 | Severe | 60 |
| 8 | Art tri | 6 | D | 0 | Severe | 50 |
| 9 | Art tri | 3 | M | 0 | Severe | 100 |
| 10 | Art tri | 6 | D | 0 | Severe | 10 |
| 11 | Art tri | 6 | D | 0 | Severe | 65 |
| 12 | Art tri | 5 | D | 0 | Moderate | 75 |
| 13 | Art tri | 1 | M | 0 | Light | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 1 | M | 0 | Light | 100 |
| 16 | Art tri | 8 | D | - | Moderate | 0 |
| 17 | Art tri | 1 | M | 0 | Light | 100 |
| 18 | Art tri | 2 | M | 10 | Moderate | 100 |
| 19 | Art tri | 5 | M | 0 | Moderate | 90 |
| 20 | Art tri | 3 | M | 0 | Severe | 100 |
| 21 | Art tri | 2 | M | 0 | Moderate | 100 |
| 22 | Art tri | 8 | D | - | - | 0 |
| 23 | Art tri | 1 | M | 0 | Light | 100 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Art tri | 5 | D | 0 | Moderate | 50 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 26

T 1S R 99W S 24 Date: August 14, 1977

Aspect (degrees)_______ Slope (degrees)_______ Elevation (feet) 6620

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 2 | M | 0 | Moderate | 100 |
| 2 | Art tri | 6 | D | 0 | Severe | 65 |
| 3 | Art tri | 8 | D | - | - | 0 |
| 4 | Art tri | 8 | D | - | - | 0 |
| 5 | Art tri | 6 | D | 30 | Severe | 30 |
| 6 | Art tri | 6 | D | 0 | Severe | 40 |
| 7 | Art tri | 6 | D | 5 | Severe | 45 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 8 | D | - | Severe | 0 |
| 10 | Art tri | 6 | D | 0 | Severe | 50 |
| 11 | Art tri | 1 | M | 0 | Light | 100 |
| 12 | Art tri | 4 | D | 0 | Light | 25 |
| 13 | Art tri | 3 | M | 0 | Severe | 100 |
| 14 | Art tri | 8 | D | - | - | 0 |
| 15 | Art tri | 3 | M | 5 | Severe | 100 |
| 16 | Art tri | 4 | M | 0 | Light | 80 |
| 17 | Art tri | 1 | M | 5 | Light | 100 |
| 18 | Art tri | 1 | M | 0 | Light | 100 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 5 | D | 0 | Moderate | 65 |
| 22 | Art tri | 2 | M | 5 | Moderate | 100 |
| 23 | Art tri | 7 | M | 15 | Moderate | 100 |
| 24 | Art tri | 8 | D | - | - | 0 |
| 25 | Art tri | 2 | M | 10 | Moderate | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 27

T 1S R 99W S 24 Date: August 14, 1977

Aspect (degrees) ______ Slope (degrees) ______ Elevation (feet) 6520

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 6 | M | 0 | Severe | 90 |
| 2 | Art tri | 3 | M | 0 | Severe | 100 |
| 3 | Art tri | 2 | M | 0 | Moderate | 100 |
| 4 | Art tri | 2 | M | 0 | Moderate | 100 |
| 5 | Art tri | 3 | M | 10 | Severe | 100 |
| 6 | Art tri | 2 | M | 6 | Moderate | 100 |
| 7 | Art tri | 8 | D | - | - | 0 |
| 8 | Art tri | 6 | D | 0 | Severe | 75 |
| 9 | Art tri | 6 | D | 0 | Severe | 65 |
| 10 | Art tri | 3 | M | 0 | Severe | 100 |
| 11 | Art tri | 6 | D | 0 | Severe | 50 |
| 12 | Art tri | 3 | M | 0 | Severe | 100 |
| 13 | Art tri | 6 | D | 0 | Severe | 30 |
| 14 | Art tri | 3 | M | 0 | Severe | 100 |
| 15 | Art tri | 6 | D | 0 | Severe | 75 |
| 16 | Art tri | 5 | D | 0 | Moderate | 65 |
| 17 | Art tri | 1 | M | 10 | Light | 100 |
| 18 | Art tri | 8 | D | - | - | 0 |
| 19 | Art tri | 6 | D | 0 | Severe | 45 |
| 20 | Art tri | 6 | M | 0 | Severe | 85 |
| 21 | Art tri | 3 | M | 0 | Severe | 100 |
| 22 | Art tri | 2 | M | 0 | Moderate | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Art tri | 2 | M | 0 | Moderate | 85 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 28

T 2S R 99W S 4 Date: August 15, 1977

Aspect (degrees) SE Slope (degrees) 10 Elevation (feet) 7050

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 4 | M | 0 | Light | 85 |
| 2 | Art tri | 8 | D | - | - | 0 |
| 3 | Art tri | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 1 | M | 0 | Light | 100 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 1 | M | 0 | Light | 100 |
| 7 | Art tri | 5 | D | 0 | Moderate | 75 |
| 8 | Art tri | 4 | D | 0 | Light | 75 |
| 9 | Art tri | 1 | M | 0 | Light | 100 |
| 10 | Art tri | 8 | D | - | Light | 0 |
| 11 | Art tri | 9 | D | - | Moderate | 0 |
| 12 | Art tri | 1 | M | 0 | Light | 100 |
| 13 | Art tri | 4 | D | 0 | Light | 50 |
| 14 | Art tri | 2 | M | 0 | Moderate | 100 |
| 15 | Art tri | 4 | M | 0 | Light | 85 |
| 16 | Art tri | 4 | M | 0 | Light | 90 |
| 17 | Art tri | 4 | D | 0 | Light | 60 |
| 18 | Art tri | 1 | M | 0 | Light | 100 |
| 19 | Art tri | 8 | D | - | Light | 0 |
| 20 | Art tri | 4 | M | 0 | Light | 50 |
| 21 | Art tri | 8 | D | - | Light | 0 |
| 22 | Art tri | 1 | M | 0 | Light | 100 |
| 23 | Art tri | 1 | M | 0 | Light | 100 |
| 24 | Art tri | 1 | M | 0 | Light | 100 |
| 25 | Art tri | 8 | D | - | - | 0 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 29

T 1S R 99W S 34 Date: August 16, 1977

Aspect (degrees) SW Slope (degrees) 1-2 Elevation (feet) 6700

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 1 | M | 0 | Light | 100 |
| 2 | Art tri | 2 | M | 0 | Moderate | 100 |
| 3 | Art tri | 1 | M | 0 | Light | 100 |
| 4 | Art tri | 2 | M | 5 | Moderate | 100 |
| 5 | Art tri | 1 | M | 0 | Light | 100 |
| 6 | Art tri | 2 | M | 0 | Moderate | 100 |
| 7 | Art tri | 1 | M | 0 | Light | 100 |
| 8 | Art tri | 1 | M | 0 | Light | 100 |
| 9 | Art tri | 2 | M | 0 | Moderate | 100 |
| 10 | Art tri | 3 | M | 0 | Severe | 100 |
| 11 | Art tri | 1 | M | 5 | Light | 100 |
| 12 | Art tri | 2 | M | 0 | Moderate | 100 |
| 13 | Art tri | 2 | M | 0 | Moderate | 100 |
| 14 | Art tri | 1 | M | 0 | Light | 100 |
| 15 | Art tri | 1 | M | 0 | Light | 100 |
| 16 | Art tri | 1 | M | 5 | Light | 100 |
| 17 | Art tri | 2 | M | 0 | Moderate | 100 |
| 18 | Art tri | 1 | M | 5 | Light | 100 |
| 19 | Art tri | 2 | M | 0 | Moderate | 100 |
| 20 | Art tri | 1 | M | 0 | Light | 100 |
| 21 | Art tri | 5 | D | 0 | Moderate | 50 |
| 22 | Art tri | 6 | D | 0 | Severe | 50 |
| 23 | Art tri | 3 | M | 10 | Severe | 100 |
| 24 | Art tri | 3 | M | 0 | Severe | 100 |
| 25 | Art tri | 3 | M | 5 | Severe | 100 |

BROWSE CONDITION AND UTILIZATION DATA SHEET

Vegetation Type: Sagebrush Sample Unit #: 30

T 2S R 99W S 2 Date: August 16, 1977

Aspect (degrees) NW Slope (degrees) Elevation (feet) 7020

Field Analyst(s): C.V. Braun

| No. | Species | Form Class | Age Class | Leader Use (%) | Hedging Class | Availability(%) |
|---|---|---|---|---|---|---|
| 1 | Art tri | 2 | M | 0 | Moderate | 100 |
| 2 | Art tri | 3 | D | 0 | Severe | 70 |
| 3 | Art tri | 8 | D | - | Severe | 0 |
| 4 | Art tri | 2 | M | 10 | Moderate | 100 |
| 5 | Art tri | 2 | M | 0 | Moderate | 100 |
| 6 | Art tri | 6 | D | 75 | Severe | 50 |
| 7 | Art tri | 2 | M | 5 | Moderate | 100 |
| 8 | Art tri | 2 | M | 0 | Moderate | 100 |
| 9 | Art tri | 2 | M | 0 | Moderate | 100 |
| 10 | Art tri | 6 | D | 5 | Moderate | 25 |
| 11 | Art tri | 1 | M | 15 | Light | 100 |
| 12 | Art tri | 5 | D | 0 | Moderate | 50 |
| 13 | Art tri | 1 | M | 30 | Light | 100 |
| 14 | Art tri | 6 | D | 0 | Severe | 75 |
| 15 | Art tri | 2 | M | 0 | Moderate | 100 |
| 16 | Art tri | 2 | M | 0 | Moderate | 100 |
| 17 | Art tri | 1 | M | 10 | Light | 100 |
| 18 | Art tri | 6 | D | 30 | Severe | 35 |
| 19 | Art tri | 3 | M | 0 | Severe | 100 |
| 20 | Art tri | 6 | D | 0 | Severe | 10 |
| 21 | Art tri | 6 | M | 0 | Severe | 80 |
| 22 | Art tri | 1 | M | 5 | Light | 100 |
| 23 | Art tri | 2 | M | 0 | Moderate | 100 |
| 24 | Art tri | 1 | M | 60 | Light | 100 |
| 25 | Art tri | 1 | M | 70 | Light | 100 |

APPENDIX G

MULE DEER RAW DATA

MAY 1977

SINGLE TRANSECT PELLET GROUP COUNT FIELD DATA SHEET

Project: RBOSP Transect: Sagebrush Plot Size: 4 $m^2$

Location: Tract C-a Section 9

Date Pellet Groups Initially Removed: ______ Survey No: ______

| Plot No. | Inspector: Date: 5/11/77 New Pellet Groups Observed | Painted Fall 76 Groups | Landscape and Vegetation Information |
|---|---|---|---|
| 1 | 0 | 2 | |
| 2 | 0 | 1 | |
| 3 | 0 | 0 | |
| 4 | 0 | 1 | |
| 5 | 0 | 1 | |
| 6 | 0 | 2 | |
| 7 | 0 | 2 | |
| 8 | 0 | 3 | |
| 9 | 0 | 1 | |
| 10 | 0 | 2 | |
| 11 | 0 | 1 | |
| 12 | 1 | 1 | |
| 13 | 0 | 2 | |
| 14 | 0 | 2 | |
| 15 | 0 | 1 | |
| 16 | 1 | 1 | |
| 17 | 0 | 1 | |
| 18 | 0 | 1 | |
| 19 | 0 | 1 | |
| 20 | 0 | 1 | |
| 21 | 0 | 1 | |
| 22 | 0 | 1 | |
| 23 | 0 | 1 | |
| 24 | 0 | 2 | |
| 25 | 1 | 1 | |
| Total | 3 | 33 | |

SINGLE TRANSECT PELLET GROUP COUNT FIELD DATA SHEET

Project: RBOSP Transect: Mixed Brush Plot Size: 4 $m^2$

Location: Tract C-a Section 32

Date Pellet Groups Initially Removed: Survey No:

| Plot No. | Inspector: Date: 5/9/77 Pellet Groups Observed | Painted Fall 76 Groups | Landscape and Vegetation Information |
|---|---|---|---|
| 1 | 0 | 2 | |
| 2 | 0 | 1 | |
| 3 | 0 | 1 | |
| 4 | 0 | 0 | |
| 5 | 1 | 2 | |
| 6 | 1 | 1 | |
| 7 | 0 | 1 | |
| 8 | 0 | 1 | |
| 9 | 1 | 1 | |
| 10 | 0 | 1 | |
| 11 | 0 | 0 | |
| 12 | 0 | 1 | |
| 13 | 1 | 1 | |
| 14 | 1 | 1 | |
| 15 | 0 | 1 | |
| 16 | 0 | 1 | |
| 17 | 0 | 1 | |
| 18 | 0 | 1 | |
| 19 | 0 | 1 | |
| 20 | 0 | 3 | |
| 21 | 1 | 2 | |
| 22 | 0 | 2 | |
| 23 | 0 | 1 | |
| 24 | 0 | 2 | |
| 25 | 0 | 1 | |
| Total | 6 | 30 | |

SINGLE TRANSECT PELLET GROUP COUNT FIELD DATA SHEET

Project: RBOSP Transect: Pinion-Juniper Plot Size: 4 $m^2$

Location: Tract C-a Section 3

Date Pellet Groups Initially Removed: Survey No:

| Plot No. | Inspector: Date: 5/11/77 Pellet Groups Observed | Painted Fall 76 Groups | Landscape and Vegetation Information |
|---|---|---|---|
| 1 | 0 | 1 | |
| 2 | 0 | 2 | |
| 3 | 0 | 1 | |
| 4 | 0 | 2 | |
| 5 | 0 | 1 | |
| 6 | 0 | 1 | |
| 7 | 0 | 1 | |
| 8 | 0 | 2 | |
| 9 | 0 | 1 | |
| 10 | 0 | 2 | |
| 11 | 0 | 1 | |
| 12 | 0 | 1 | |
| 13 | 0 | 2 | |
| 14 | 0 | 1 | |
| 15 | 0 | 2 | |
| 16 | 0 | 1 | |
| 17 | 0 | 2 | |
| 18 | 0 | 1 | |
| 19 | 0 | 1 | |
| 20 | 0 | 2 | |
| 21 | 0 | 1 | |
| 22 | 0 | 3 | |
| 23 | 0 | 1 | |
| 24 | 0 | 2 | |
| 25 | 0 | 1 | |
| Total | 0 | 36 | |

APPENDIX H

MULE DEER RAW DATA

AUGUST 1977

SINGLE TRANSECT PELLET GROUP COUNT FIELD DATA SHEET

Project: RBOSP Transect: Sagebrush Plot Size: 4 $m^2$

Location: Tract C-a Section 9

Date Pellet Groups Initially Removed: 5/11/77 Survey No:

| Plot No. | Inspector: Date: 8/30/77 Pellet Groups Observed | Landscape and Vegetation Information |
|---|---|---|
| 1 | 0 | |
| 2 | 0 | |
| 3 | 0 | |
| 4 | 0 | |
| 5 | 0 | |
| 6 | 0 | |
| 7 | 0 | |
| 8 | 0 | |
| 9 | 0 | |
| 10 | 0 | |
| 11 | 0 | |
| 12 | 0 | Old groups washed away-only painted stones remain |
| 13 | 0 | |
| 14 | 0 | |
| 15 | 0 | |
| 16 | 0 | Sp group completely dried and lost most color |
| 17 | 0 | |
| 18 | 0 | |
| 19 | 0 | |
| 20 | 0 | |
| 21 | 0 | |
| 22 | 0 | |
| 23 | 0 | |
| 24 | 0 | |
| 25 | 0 | |
| Total | 0 | |

SINGLE TRANSECT PELLET GROUP COUNT FIELD DATA SHEET

Project: RBOSP Transect: Mixed Brush Plot Size: 4 $m^2$

Location: Tract C-a Section 32

Date Pellet Groups Initially Removed: 5/9/77 Survey No:

| Plot No. | Inspector: Date: 8/30/77 Pellet Groups Observed | Landscape and Vegetation Information |
|---|---|---|
| 1 | 0 | |
| 2 | 0 | |
| 3 | 0 | |
| 4 | 0 | Stake washed away |
| 5 | 0 | Old groups washed away |
| 6 | 0 | |
| 7 | 0 | |
| 8 | 0 | |
| 9 | 0 | |
| 10 | 0 | |
| 11 | 0 | |
| 12 | 0 | |
| 13 | 0 | |
| 14 | 0 | |
| 15 | 0 | |
| 16 | 0 | |
| 17 | 0 | |
| 18 | 0 | |
| 19 | 0 | |
| 20 | 0 | |
| 21 | 0 | |
| 22 | 0 | |
| 23 | 0 | |
| 24 | 0 | |
| 25 | 0 | |
| Total | 0 | |

No new groups seen anywhere along transect-new rabbit pellets common

SINGLE TRANSECT PELLET GROUP COUNT FIELD DATA SHEET

Project: RBOSP Transect: Pinion-Juniper Plot Size: 4 $m^2$

Location: Tract C-a Section 3

Date Pellet Groups Initially Removed: 5/11/77 Survey No:

| Plot No. | Inspector: Date: 8/30/77 Pellet Groups Observed | Landscape and Vegetation Information |
|---|---|---|
| 1 | 0 | |
| 2 | 0 | |
| 3 | 0 | |
| 4 | 1 | |
| 5 | 0 | |
| 6 | 0 | |
| 7 | 0 | |
| 8 | 0 | |
| 9 | 0 | |
| 10 | 0 | |
| 11 | 0 | |
| 12 | 1 | |
| 13 | 0 | |
| 14 | 0 | |
| 15 | 0 | |
| 16 | 0 | |
| 17 | 0 | |
| 18 | 0 | |
| 19 | 0 | |
| 20 | 0 | |
| 21 | 0 | |
| 22 | 0 | |
| 23 | 0 | |
| 24 | 0 | |
| 25 | 0 | |
| Total | 2 | |

APPENDIX I

SMALL MAMMAL RAW DATA

MAY 1977

INDIVIDUAL CAPTURES IN PINYON-JUNIPER, UPLAND SAGEBRUSH, AND MIXED BRUSH HABITATS ON RBOSP TRACT C-A DURING MAY 8 - 10, 1977.

| | Sampling Time | Pinyon-Juniper | | | | | | Upland Sagebrush | | | | | | Mixed Brush | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Line 1 | | | Line 2 | | | Line 1 | | | Line 2 | | | Line 1 | | | Line 2 | | |
| | | ♂ | ♀ | R | ♂ | ♀ | R | ♂ | ♀ | R | ♂ | ♀ | R | ♂ | ♀ | R | ♂ | ♀ | R |
| May 8, 1977 | | | | | | | | | | | | | | | | | | | |
| *Peromyscus maniculatus* | A.M. | | | | | | | | 1 | | 1 | | | | | | 1 | | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| *Eutamius minimus* | A.M. | | | | | | | | | | | | | | | | | | |
| | P.M. | 2 | | | 2 | | | 1 | 1 | | | | | | 3 | | | 1 | |
| *Eutamius quadrivittatus* | A.M. | | | | 1 | 1 | | | | | | | | | | | | | |
| | P.M. | | | | 2 | 1 | | | | | | | | | | | | | |
| May 9, 1977 | | | | | | | | | | | | | | | | | | | |
| *Peromyscus maniculatus* | A.M. | | | | | | | 2 | 1 | 1 | 1 | 1 | 1 | | | | | | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| *Eutamius minimus* | A.M. | | | | 1 | | | | | | | | | | | | | | |
| | P.M. | 1 | | 1* | | 2 | | 1 | 1 | | 1 | | | 1 | 1 | 1 | | 2 | 1 |
| *Eutamius quadrivittatus* | A.M. | | | | 2 | | 1 | | | | | | | | | | | | |
| | P.M. | | 1 | 1 | 3 | 2 | 4 | | | | | | | | | | | | |
| *Spermophilus lateralis* | A.M. | | | | | | | | | 1** | | | | | | | | | |
| | P.M. | | | | | | | | | | | | | | | | | | |

(Continued)

| | Sampling Time | Pinyon-Juniper Line 1 ♂ | ♀ | R | Line 2 ♂ | ♀ | R | Upland Sagebrush Line 1 ♂ | ♀ | R | Line 2 ♂ | ♀ | R | Mixed Brush Line 1 ♂ | ♀ | R | Line 2 ♂ | ♀ | R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| May 10, 1977 | | | | | | | | | | | | | | | | | | | |
| Peromyscus maniculatus | A.M. | | 2 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 2 | 1 | | 1 | | | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| Eutamius minimus | A.M. | | | | 1 | 1 | 1 | 1 | | 1 | 1 | | | | | | | 1 | 1 |
| | P.M. | | | | 1 | 1 | 2 | 1 | | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 2 | 4 |
| Eutamius quadrivittatus | A.M. | | | | 2 | 2 | 2 | | | | | | | | | | | | |
| | P.M. | 1 | 1 | 2 | 2 | | 2 | | | | | | | | | | | 1 | |
| Spermophilus lateralis | A.M. | | | | | 1 | | | | | | | | | | | | | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| Lagurus curtatus | A.M. | | | | | | | | | | | | | | | | | 1 | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| Total-3 days | | | | | | | | | | | | | | | | | | | |
| Peromyscus maniculatus | A.M. | | 2 | 1 | | | | 3 | 3 | 2 | 3 | 2 | 3 | 1 | | 1 | 1 | | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| Eutamius minimus | A.M. | | | | 2 | 1 | 1 | 1 | | 1 | 2 | | | | | | | 1 | 1 |
| | P.M. | 3 | | | 3 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 3 | 6 | 3 | 3 | 5 | 5 |
| Eutamius quadrivittatus | A.M. | | | | 5 | 3 | 3 | | | | | | | | | | | | |
| | P.M. | 1 | 2 | 3 | 7 | 3 | 6 | | | | | | | | | | | | |
| Spermophilus lateralis | A.M. | | | | | 1 | | | | | | | | | | | | | |
| | P.M. | | | | | | | | | | | | | | | | | | |
| Lagurus curtatus | A.M. | | | | | | | | | | | | | | | | | 1 | |
| | P.M. | | | | | | | | | | | | | | | | | | |

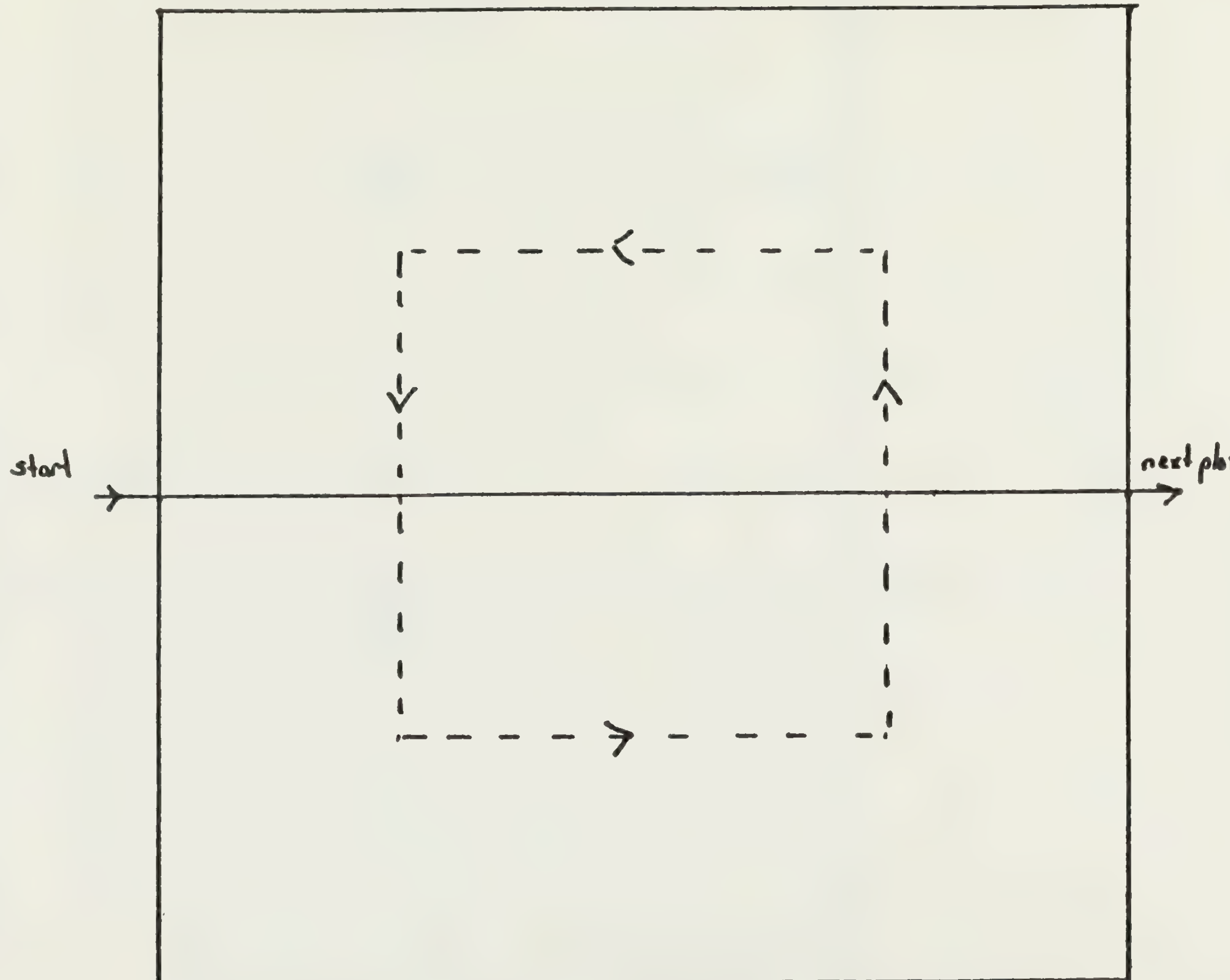
*Dead **Sighted R= Recaptures

APPENDIX J

AVIFAUNA RAW DATA

JUNE 1977

SAMPLE DATA SHEET - ONE 1 HECTARE PLOT (100 m x 100 m).
OBSERVATIONS WITHIN EACH 1 HECTARE UNIT RECORDED ON THIS SHEET.
SHOWS ROUTE WALKED EACH REPLICATE.




1. Habitat

2. Quadrant

3. Date + replicate

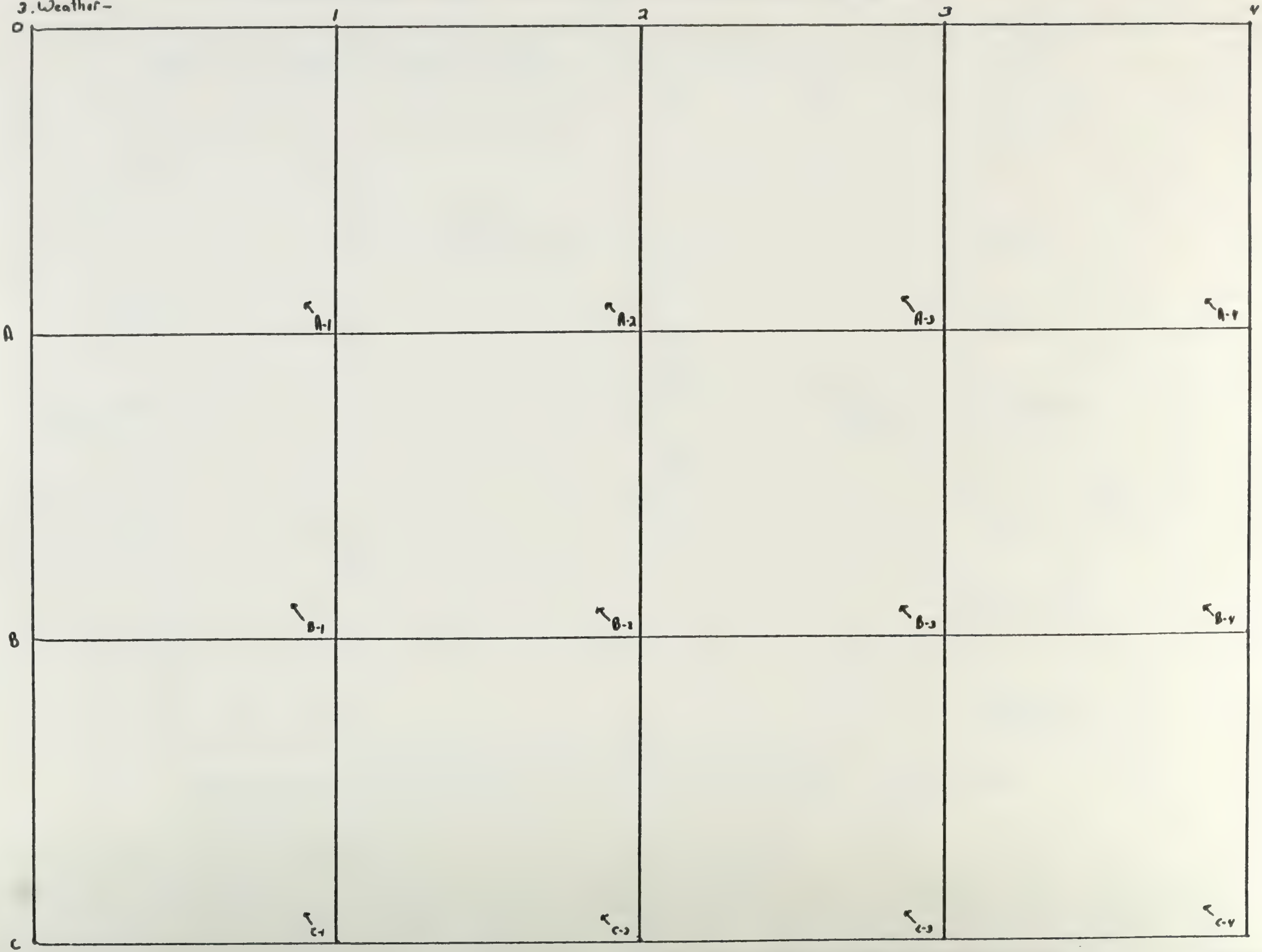
4. Weather

1. Habitat -

2. Date + replicate -

3. Weather -

SAMPLE DATA SHEET - 1 12 HECTARE PLOT.
COMPOSITE OBSERVATIONS RECORDED ON THIS SHEET
FOR EACH REPLICATE AND FOR ALL REPLICATES COMBINED.



APPENDIX K

AVIFAUNA RAW DATA

JUNE 1977

COMPOSITE MAP SHOWING BIRD OBSERVATIONS MADE FOR ALL THREE CENSUS RUNS ON THE MIXED BRUSH VEGETATION TYPE[a] NEAR RBOSP TRACT C-a.

2 = Brewer's Sparrow

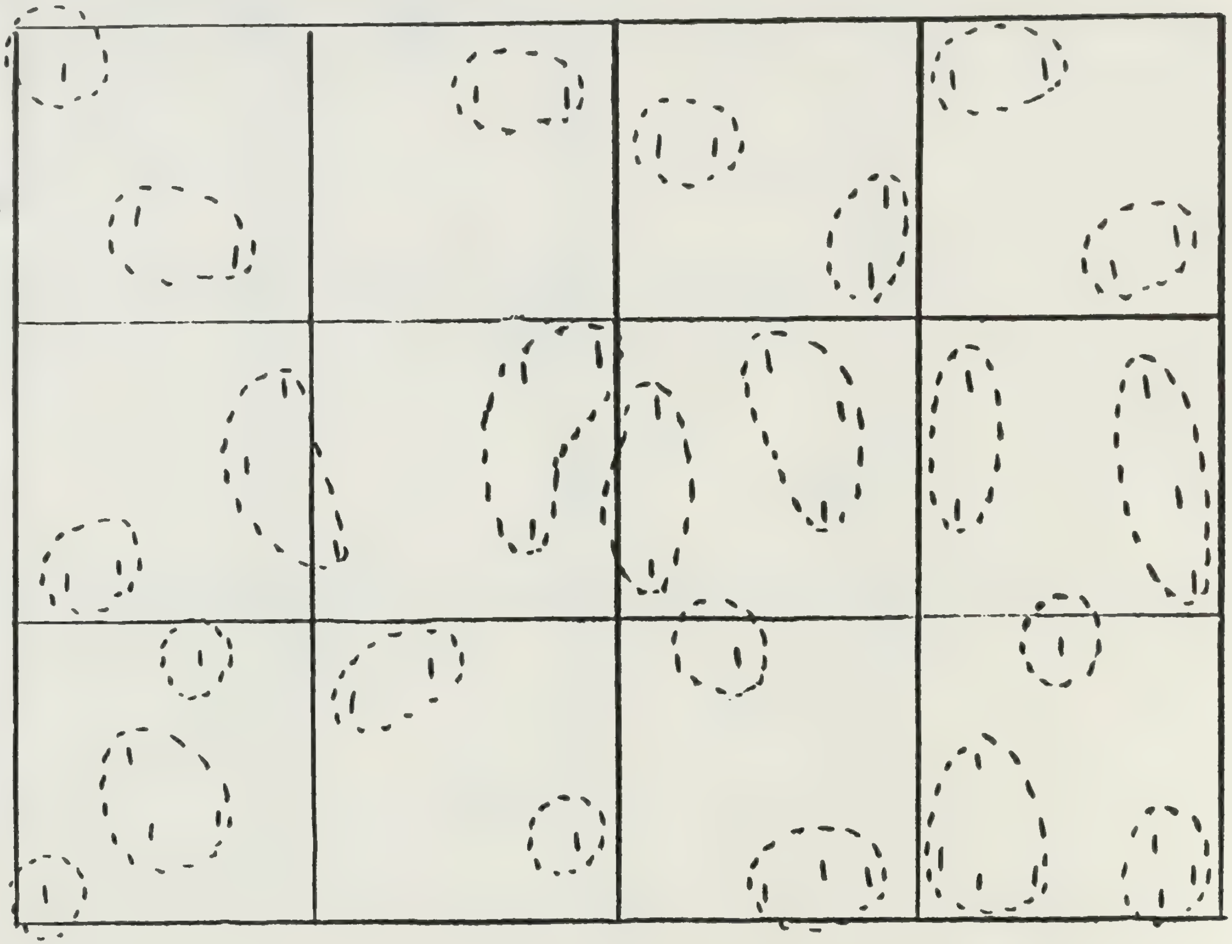
3 = Blue-gray Gnatcatcher

a. Dotted lines encircling number clusters indicate approximate location of a single breeding pair.

Note: See Figure 11 in the text for locations of sampling sites

COMPOSITE MAP SHOWING BIRD OBSERVATIONS MADE FOR ALL THREE CENSUS RUNS ON THE MIXED BRUSH VEGETATION TYPE[a] NEAR RBOSP TRACT C-a.

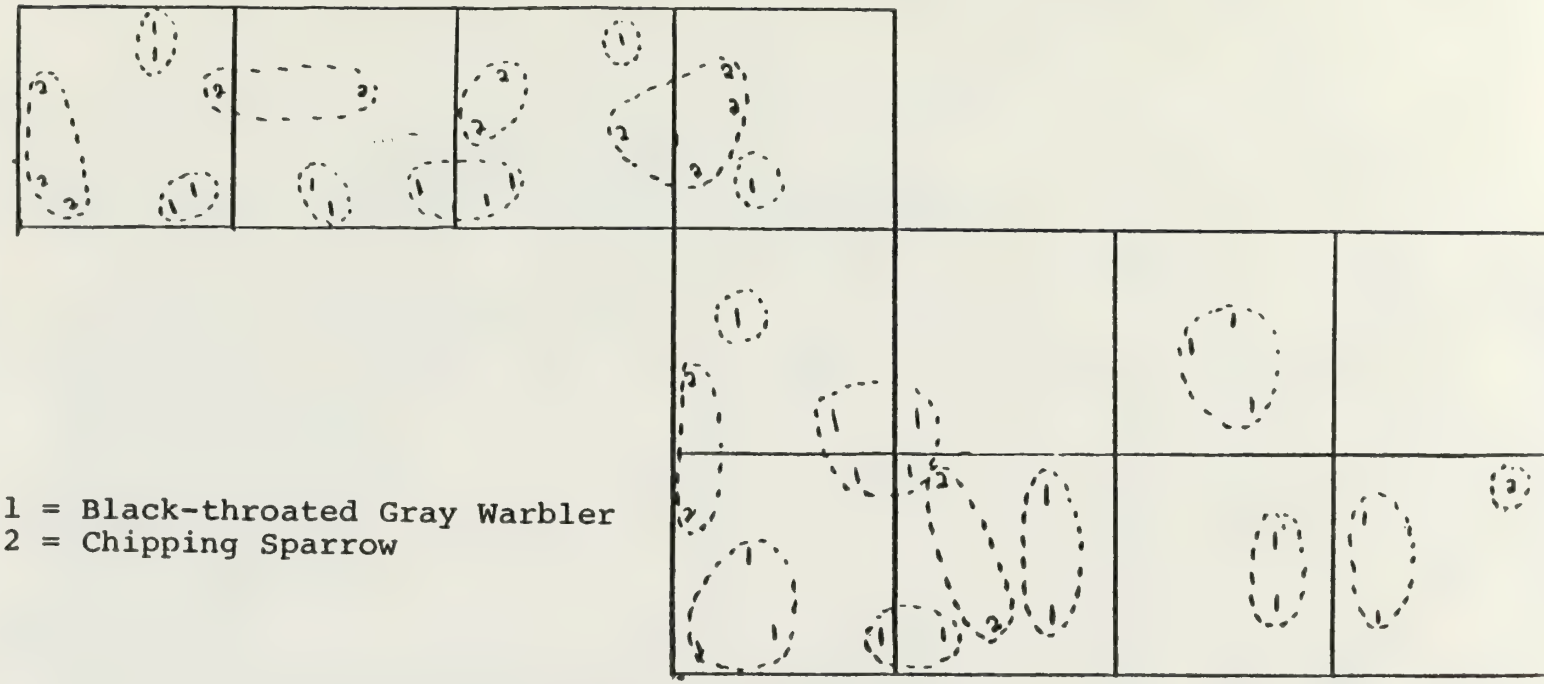
1 = Green-tailed Towhee



a. Dotted lines encircling number clusters indicate approximate location of a single breeding pair.

Note: See Figure 11 in the text for locations of sampling sites.

COMPOSITE MAP SHOWING BIRD OBSERVATIONS MADE FOR ALL THREE CENSUS RUNS ON THE PINYON-JUNIPER VEGETATION TYPE[a] ON RBOSP TRACT C-a.

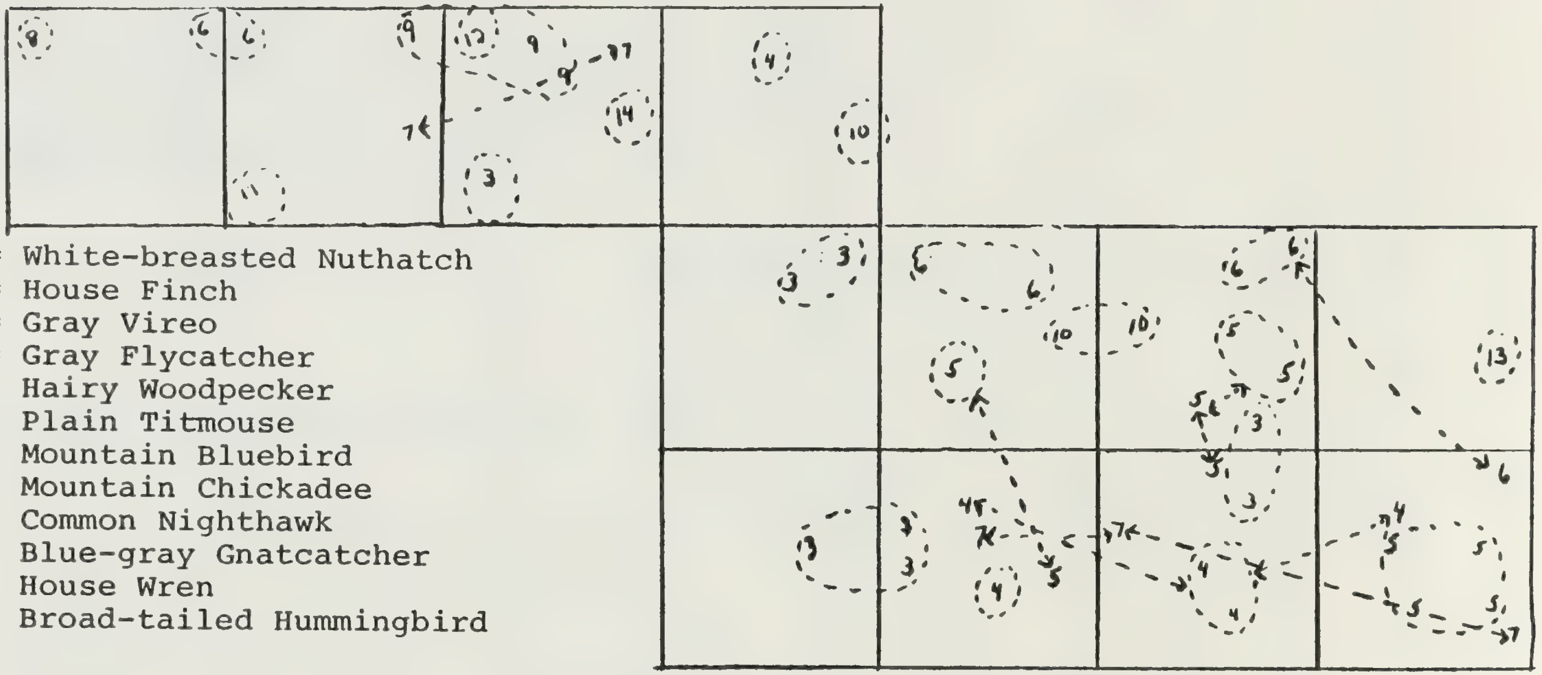


1 = Black-throated Gray Warbler
2 = Chipping Sparrow

a. Dotted lines encircling number clusters indicate approximate location of a single breeding pair.

Note: See Figure 11 in the text for locations of sampling sites.

COMPOSITE MAP SHOWING BIRD OBSERVATIONS MADE FOR ALL THREE CENSUS RUNS ON THE PINYON—JUNIPER VEGETATION TYPE[a] ON RBOSP TRACT C-a.

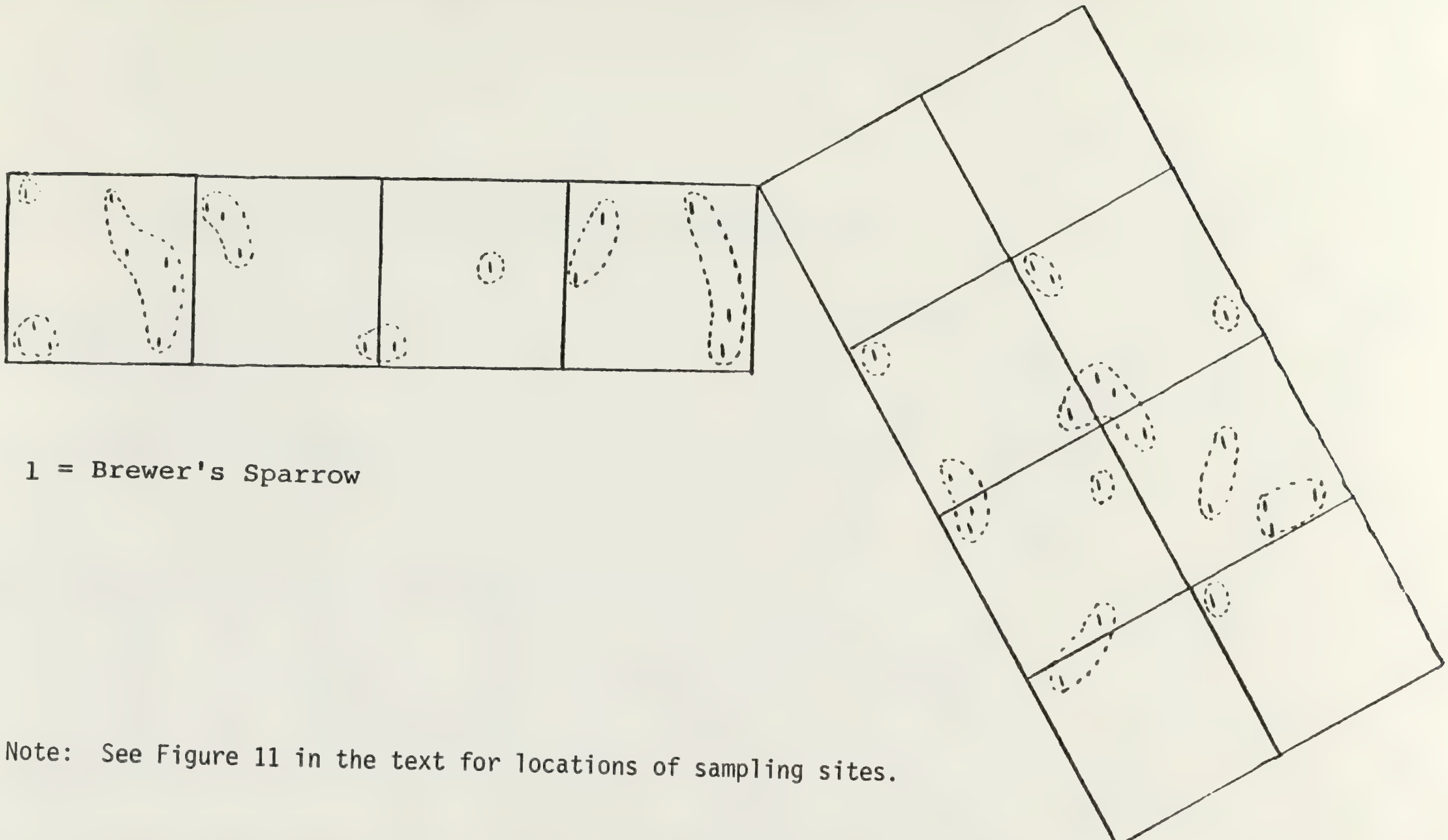


3 = White-breasted Nuthatch
4 = House Finch
5 = Gray Vireo
6 = Gray Flycatcher
7 - Hairy Woodpecker
8 = Plain Titmouse
9 = Mountain Bluebird
10 = Mountain Chickadee
11 = Common Nighthawk
12 = Blue-gray Gnatcatcher
13 = House Wren
14 = Broad-tailed Hummingbird

a. Dotted lines encircling number clusters, or arrows joining 2 or more numbers, indicate approximate location of a single breeding pair.

Note: See Figure 11 in the text for locations of sampling sites.

COMPOSITE MAP SHOWING BIRD OBSERVATIONS MADE FOR ALL THREE CENSUS RUNS ON THE UPLAND SAGEBRUSH VEGETATION TYPE[a] ON RBOSP TRACT C-a.

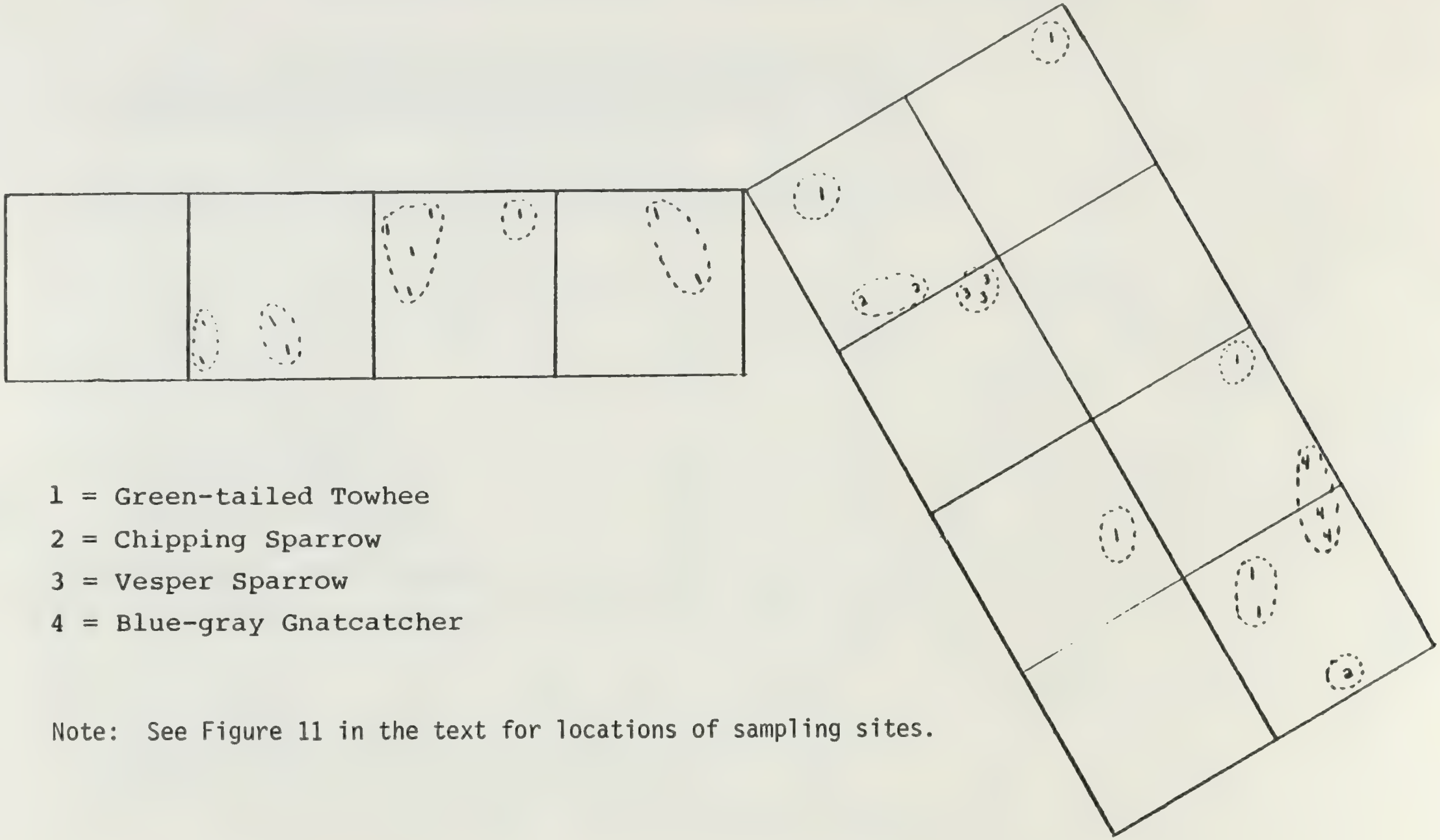


1 = Brewer's Sparrow

Note: See Figure 11 in the text for locations of sampling sites.

a. Dotted lines encircling number clusters indicate approximate location of a single breeding pair.

COMPOSITE MAP SHOWING BIRD OBSERVATIONS MADE FOR ALL THREE CENSUS RUNS ON THE UPLAND SAGEBRUSH VEGETATION TYPE[a] ON RBOSP TRACT C-a.



1 = Green-tailed Towhee

2 = Chipping Sparrow

3 = Vesper Sparrow

4 = Blue-gray Gnatcatcher

Note: See Figure 11 in the text for locations of sampling sites.

a. Dotted lines encircling number clusters indicate approximate location of a single breeding pair.

# SECTION III

## HYDROLOGY STUDIES
## APPENDICES

# APPENDIX L

# WATER QUALITY DATA

```
QUALITY CONTROL INFORMATION FOR LAB ID # 136038 RECORD #  2720

**THIS CONSTITUENT HAS BEEN REPORTED AS <= TO 0, LOOK AT--  BICARBONATE         VALUE =      0.000
**THIS CONSTITUENT HAS BEEN REPORTED AS <= TO 0, LOOK AT--  MAGNESIUM DISS      VALUE =      0.000
**THIS CONSTITUENT HAS BEEN REPORTED AS <= TO 0, LOOK AT--  POTASSIUM DISS      VALUE =      0.000
**THIS CONSTITUENT HAS BEEN REPORTED AS <= TO 0, LOOK AT--  SODIUM DISS         VALUE =      0.000
**CATION/.01(CONDUCTANCE) RATIO IS EITHER BELOW 0.92 OR ABOVE 1.24---------RATIO VALUE =      0.083
**THE PERCENT DIFFERENCE COMPUTED FOR THE ANALYSIS DOES NOT AGREE WITH THE CURVE VALUE =     34.965
```

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 09/07/77

09306235 - CORRAL GULCH BELOW WATER GULCH, NR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | TIME | TEMPER-ATURE (DEG C) | WEATHER | SURFACE AREA (SQUARE MILES) | INSTAN-TANEOUS DIS-CHARGE (CFS) | TUR-BID-ITY (NTU) | COLOR (PLAT-INUM-COBALT UNITS) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | DIS-SOLVED OXYGEN (MG/L) | PH (UNITS) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT 12... | 1040 | 11.0 | 0 | 8.6 | .15 | 2 | 3 | 1000 | 10.3 | 8.0 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 09/07/77
09306235 - CORRAL GULCH BELOW WATER GULCH, NR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | CAR-BONATE (CO3) (MG/L) | DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L) | DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) | PHOS-PHATE (PO4) (MG/L) | DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L) | DIS-SOL-VED ORGANIC CARBON (C) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | 0 | .30 | .00 | .30 | .83 | .03 | .03 | .01 | .01 | 22 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 09/07/77
09306235 - CORRAL GULCH BELOW WATER GULCH, NR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | SUS-PENDED ORGANIC CARBON (C) (MG/L) | HARD-NESS (CA,MG) (MG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | SODIUM AD-SORP-TION RATIO | PERCENT SODIUM | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | .1 | 480 | 90 | 62 | 99 | 2.0 | 31 | 2.0 | 9.3 | 290 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY PROCESS DATE 09/07/77
09306235 - CORRAL GULCH BELOW WATER GULCH, NR RANGELY, CO. DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | DIS-SOLVED FLUO-RIDE (F) (MG/L) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED BORON (B) (UG/L) | ATMOS-PHERIC ODOR (SEVER-ITY) | TUR-BID-ITY (SEVER-ITY) | DIS-SOLVED SOLIDS (TONS PER DAY) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED AMMONIA (NH4) (MG/L) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) |
|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | |
| 12... | .3 | 22 | 100 | 0 | 0 | .30 | 1.01 | .00 | 6980 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306242 - CORRAL GULCH NEAR RANGELY, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | TIME | TEMPER-ATURE (DEG C) | WEATHER | SURFACE AREA (SQUARE MILES) | INSTAN-TANEOUS DIS-CHARGE (CFS) | TUR-BID-ITY (NTU) | COLOR (PLAT-INUM-COBALT UNITS) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | DIS-SOLVED OXYGEN (MG/L) | PH (UNITS) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | 1220 | 11.0 | 0 | 31 | .63 | 4 | 3 | 1100 | 9.5 | 7.9 |
| APR | | | | | | | | | | |
| 18... | 1225 | 14.0 | -- | 31 | .35 | -- | -- | 1300 | 9.2 | 7.9 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306242 - CORRAL GULCH NEAR RANGELY, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | CARBON DIOXIDE (CO2) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L) | DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) | PHOS-PHATE (PO4) (MG/L) | DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | 8.5 | 347 | 423 | 0 | .24 | .00 | .24 | .16 | .25 | .09 |
| APR | | | | | | | | | | |
| 18... | 10 | 410 | 500 | 0 | -- | -- | -- | .14 | -- | -- |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY — PROCESS DATE 09/07/77

09306242 - CORRAL GULCH NEAR RANGELY, CO. — DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | TOTAL PHOS-PHORUS (P) (MG/L) | DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L) | DIS-SOL-VED ORGANIC CARBON (C) (MG/L) | SUS-PENDED ORGANIC CARBON (C) (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | SODIUM AD-SORP-TION RATIO |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | .08 | .03 | 5.2 | .3 | 450 | 110 | 79 | 62 | 100 | 2.0 |
| APR | | | | | | | | | | |
| 18... | .01 | -- | 4.9 | -- | 500 | 89 | 86 | 69 | 120 | 2.3 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306242 - CORRAL GULCH NEAR RANGELY, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | CARBON DIOXIDE (CO2) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) | DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L) | DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) | PHOS-PHATE (PO4) (MG/L) | DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | 8.5 | 347 | 423 | 0 | .24 | .00 | .24 | .16 | .25 | .09 |
| APR | | | | | | | | | | |
| 18... | 10 | 410 | 500 | 0 | -- | -- | -- | .14 | -- | -- |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306242 - CORRAL GULCH NEAR RANGELY, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | TOTAL PHOS- PHORUS (P) (MG/L) | DIS- SOLVED ORTHO. PHOS- PHORUS (P) (MG/L) | DIS- SOL- VED ORGANIC CARBON (C) (MG/L) | SUS- PENDED ORGANIC CARBON (C) (MG/L) | HARD- NESS (CA,MG) (MG/L) | NON- CAR- BONATE HARD- NESS (MG/L) | DIS- SOLVED CAL- CIUM (CA) (MG/L) | DIS- SOLVED MAG- NE- SIUM (MG) (MG/L) | DIS- SOLVED SODIUM (NA) (MG/L) | SODIUM AD- SORP- TION RATIO |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | .08 | .03 | 5.2 | .3 | 450 | 110 | 79 | 62 | 100 | 2.0 |
| APR | | | | | | | | | | |
| 18... | .01 | -- | 4.9 | -- | 500 | 89 | 86 | 69 | 120 | 2.3 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306242 - CORRAL GULCH NEAR RANGELY, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | PERCENT SODIUM | DIS-SOLVED POTAS-SIUM (K) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED BORON (B) (UG/L) | DIS-SOLVED CAD-MIUM (CD) (UG/L) | DIS-SOLVED CHRO-MIUM (CR) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | 32 | 1.5 | 12 | 280 | .4 | 22 | -- | 130 | -- | -- |
| APR | | | | | | | | | | |
| 18... | 34 | 1.5 | 14 | 320 | .4 | 20 | 5 | 110 | 2 | 0 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306242 - CORRAL GULCH NEAR RANGELY, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED SELE-NIUM (SE) (UG/L) | ATMOS-PHERIC ODOR (SEVER-ITY) | DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) | DIS-SOLVED SOLIDS (TONS PER DAY) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED AMMONIA (NH4) (MG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) |
|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | |
| 12... | -- | -- | -- | 0 | 766 | 1.30 | 1.04 | .00 | -- | 6580 |
| APR | | | | | | | | | | |
| 18... | 1 | 2 | 2 | -- | 878 | .83 | 1.19 | -- | .0 | 6580 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | TIME | TEMPER-ATURE (DEG C) | SURFACE AREA (SQUARE MILES) | INSTAN-TANEOUS DIS-CHARGE (CFS) | COLOR (PLAT-INUM-COBALT UNITS) | SPE-CIFIC CON-DUCT-ANCE (MICRO-MHOS) | DIS-SOLVED OXYGEN (MG/L) | PH (UNITS) | CARBON DIOXIDE (CO2) (MG/L) | ALKA-LINITY AS CACO3 (MG/L) | BICAR-BONATE (HCO3) (MG/L) | CAR-BONATE (CO3) (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 07... | 1320 | 15.5 | 262 | -- | 17 | 3500 | 6.5 | 8.9 | 3.8 | 1530 | 1300 | 277 |
| NOV | | | | | | | | | | | | |
| 05... | 1600 | 10.5 | 262 | -- | 7 | 4500 | 9.3 | 8.8 | 5.1 | 1640 | 1490 | 251 |
| APR | | | | | | | | | | | | |
| 12... | 1115 | 8.0 | 262 | 2.4 | -- | 3720 | 9.2 | 8.4 | 13 | 1620 | 1730 | 120 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | DIS-SOLVED ORGANIC NITRO-GEN (N) (MG/L) | DIS-SOLVED AMMONIA NITRO-GEN (N) (MG/L) | DIS-SOLVED KJEL. NITRO-GEN (N) (MG/L) | DIS-SOLVED NITRITE PLUS NITRATE (N) (MG/L) | PHOS-PHATE (PO4) (MG/L) | DIS-SOLVED ORTHO PHOS-PHATE (PO4) (MG/L) | TOTAL PHOS-PHORUS (P) (MG/L) | DIS-SOLVED ORTHO. PHOS-PHORUS (P) (MG/L) | DIS-SOL-VED ORGANIC CARBON (C) (MG/L) | SUS-PENDED ORGANIC CARBON (C) (MG/L) | HARD-NESS (CA,MG) (MG/L) | NON-CAR-BONATE HARD-NESS (MG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 07... | .48 | .06 | .54 | .06 | .09 | .03 | .03 | .01 | -- | .3 | 510 | 0 |
| NOV | | | | | | | | | | | | |
| 05... | .60 | .00 | .60 | .56 | .12 | .00 | .04 | .00 | 6.5 | .3 | 510 | 0 |
| APR | | | | | | | | | | | | |
| 12... | -- | -- | -- | .69 | -- | -- | .10 | -- | -- | -- | 590 | 0 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | DIS-SOLVED CAL-CIUM (CA) (MG/L) | DIS-SOLVED MAG-NE-SIUM (MG) (MG/L) | DIS-SOLVED SODIUM (NA) (MG/L) | SODIUM AD-SORP-TION RATIO | PERCENT SODIUM | DIS-SOLVED PO-TAS-SIUM (K) (MG/L) | DIS-SOLVED CHLO-RIDE (CL) (MG/L) | DIS-SOLVED SULFATE (SO4) (MG/L) | DIS-SOLVED FLUO-RIDE (F) (MG/L) | DIS-SOLVED SILICA (SIO2) (MG/L) | DIS-SOLVED ARSENIC (AS) (UG/L) | DIS-SOLVED BORON (B) (UG/L) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT | | | | | | | | | | | | |
| 07... | 22 | 110 | 800 | 15 | 77 | 4.5 | 150 | 570 | 2.7 | 5.8 | -- | 740 |
| NOV | | | | | | | | | | | | |
| 05... | 21 | 110 | 830 | 16 | 78 | 3.9 | 130 | 540 | 2.8 | 3.3 | -- | 690 |
| APR | | | | | | | | | | | | |
| 12... | 39 | 120 | 800 | 14 | 74 | 4.2 | 110 | 590 | 1.8 | 13 | 2 | 630 |

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
09306255 - YELLOW CREEK NEAR WHITE RIVER, CO.

PROCESS DATE 09/07/77
DISTRICT CODE 08

WATER QUALITY DATA, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

| DATE | DIS-SOLVED CAD-MIUM (CD) (UG/L) | DIS-SOLVED CHRO-MIUM (CR) (UG/L) | DIS-SOLVED COPPER (CU) (UG/L) | DIS-SOLVED LEAD (PB) (UG/L) | DIS-SOLVED SELE-NIUM (SE) (UG/L) | ATMOS-PHERIC ODOR (SEVER-ITY) | DIS-SOLVED SOLIDS (SUM OF CONSTI-TUENTS) (MG/L) | DIS-SOLVED SOLIDS (TONS PER DAY) | DIS-SOLVED SOLIDS (TONS PER AC-FT) | DIS-SOLVED AMMONIA (NH4) (MG/L) | DIS-SOLVED MERCURY (HG) (UG/L) | ELEV. OF LAND SURFACE DATUM (FT. ABOVE MSL) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OCT 07... | -- | -- | -- | -- | -- | 0 | 2580 | -- | 3.51 | .08 | -- | 5535 |
| NOV 05... | -- | -- | -- | -- | -- | -- | 2630 | -- | 3.58 | .00 | -- | 5535 |
| APR 12... | 2 | 0 | 5 | 3 | 1 | -- | 2650 | 17.5 | 3.60 | -- | .0 | 5535 |

# APPENDIX M
# FLOW DATA

9-192-a. July 1967

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of Corral Gulch ~~River~~ Creek near Rangely, Colo for the Year Ending September 30, 1977

PRELIMINARY RECORD SUBJECT TO REVISION

Drainage Area 30 Square Miles. Water-Stage Recorder CONTINUOUS Ratio 1 : 6

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

PRELIMINARY RECORD SUBJECT TO REVISION

CORRAL GL. NR. RANGELY, CO. 1977

File Number 2.8 1 — 04306242 — Washington ____ District ____

Used rating table dated NO 3

Gage Read to ____ Once / Twice a Day by ____

Gage heights used to ~~half-tenths between~~ ____ and ____ feet; hundredths ~~below and tenths above these limits~~

| Day | October Gage height | October Discharge | November Gage height | November Discharge | December Gage height | December Discharge | January Gage height | January Discharge | February Gage height | February Discharge | March Gage height | March Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.18 | 0.29 | 1.19 | .50 | 1.17 | b .36 | 1.16 | .31 | 1.16 | .26 | 1.18 | .31 |
| 2 | 1.18 | .29 | 1.19 | .54 | 1.17 | .36 | 1.16 | .31 | 1.16 | .26 | 1.18 | .31 |
| 3 | 1.19 | .31 | 1.19 | .54 | 1.17 | .36 | 1.16 | .31 | 1.16 | .26 | 1.18 | .31 |
| 4 | 1.19 | .36 | 1.19 | .54 | 1.17 | .36 | 1.16 | .31 | 1.16 | .26 | 1.18 | .31 |
| 5 | 1.19 | .36 | 1.19 | .54 | 1.17 | .36 | 1.17 | b .27 | 1.16 | .26 | 1.18 | .31 |
| 6 | 1.19 | .36 | 1.19 | .54 | 1.17 | .36 | 1.17 | .27 | 1.16 | .26 | 1.18 | .36 |
| 7 | 1.18 | .31 | 1.19 | .54 | 1.17 | .36 | 1.17 | .27 | 1.16 | .26 | 1.19 | .40 |
| 8 | 1.17 | .29 | 1.19 | .54 | 1.17 | .36 | 1.17 | .26 | 1.17 | .29 | 1.19 | .40 |
| 9 | 1.17 | .31 | 1.19 | .54 | 1.17 | .36 | 1.17 | .25 | 1.17 | .26 | 1.17 | .31 |
| 10 | 1.18 | .36 | 1.19 | .54 | 1.17 | b .36 | 1.17 | b .26 | 1.16 | .22 | 1.16 | .29 |
| 11 | 1.18 | .36 | 1.19 | .54 | 1.16 | .36 | a | .27 | 1.17 | .26 | 1.16 | .31 |
| 12 | 1.19 | .40 | 1.19 | .54 | 1.16 | .36 | a | .28 | 1.17 | .26 | 1.16 | .31 |
| 13 | 1.18 | .36 | 1.19 | .54 | 1.16 | .36 | 1.15 | .29 | 1.18 | .29 | 1.15 | .29 |
| 14 | 1.18 | .36 | 1.19 | .54 | 1.16 | .36 | 1.15 | .29 | 1.18 | .29 | 1.16 | .31 |
| 15 | 1.18 | .40 | 1.19 | .54 | 1.16 | .36 | 1.15 | .26 | 1.18 | .29 | 1.16 | .31 |
| 16 | 1.19 | .43 | 1.18 | .50 | a | .31 | 1.15 | .26 | 1.19 | .31 | 1.16 | .36 |
| 17 | 1.19 | .43 | 1.18 | .50 | 1.15 | .31 | 1.16 | .29 | 1.19 | .31 | 1.16 | .36 |
| 18 | 1.18 | .40 | 1.18 | .50 | 1.15 | .31 | 1.16 | .29 | 1.19 | .31 | 1.16 | .36 |
| 19 | 1.18 | .40 | 1.18 | .50 | 1.15 | .31 | 1.16 | .29 | 1.19 | .31 | 1.15 | .31 |
| 20 | 1.20 | .46 | 1.17 | .46 | 1.15 | .31 | 1.16 | .29 | 1.19 | .29 | 1.15 | .31 |
| 21 | 1.20 | .50 | 1.18 | .50 | 1.15 | .31 | 1.16 | .29 | 1.21 | .36 | 1.15 | .31 |
| 22 | 1.20 | .50 | 1.18 | .50 | 1.15 | .31 | 1.15 | .26 | 1.20 | .31 | 1.15 | .31 |
| 23 | 1.20 | .50 | 1.18 | .50 | 1.15 | .31 | 1.15 | .26 | 1.20 | .31 | 1.15 | .31 |
| 24 | 1.19 | .46 | 1.18 | .50 | 1.16 | .36 | 1.15 | .26 | 1.19 | .29 | 1.13 | .26 |
| 25 | 1.19 | .46 | 1.18 | .50 | 1.16 | .36 | 1.16 | .29 | 1.19 | .29 | 1.13 | .26 |
| 26 | 1.20 | .50 | 1.17 | .46 | 1.16 | .31 | 1.16 | .29 | 1.18 | .29 | 1.13 | .26 |
| 27 | 1.19 | .50 | 1.17 | b .30 | 1.16 | .31 | 1.16 | .29 | 1.19 | .31 | 1.13 | .26 |
| 28 | 1.20 | .54 | a | .32 | 1.16 | .31 | 1.16 | .29 | 1.18 | .29 | 1.13 | .26 |
| 29 | 1.19 | .50 | a | .34 | 1.16 | .31 | 1.16 | .29 | | | 1.13 | .26 |
| 30 | 1.19 | .50 | 1.17 | b .36 | 1.16 | .31 | 1.16 | .29 | X | X | 1.13 | .26 |
| 31 | 1.19 | .50 | X | X | 1.16 | .31 | 1.16 | .29 | X | X | 1.13 | .26 |
| Total | | 12.70 | | 14.80 | | 10.46 | | 8.73 | | 7.96 | | 9.55 |
| Mean | | | | | | | | | | | | |
| Second-feet per square mile | | | | | | | | | | | | |
| Run-off in inches | | | | | | | | | | | | |
| Run-off in acre-feet | | | | | | | | | | | | |
| Maximum | | | | | | | | | | | | |
| Minimum | | | | | | | | | | | | |

| Day | April Gage height | April Discharge | May Gage height | May Discharge | June Gage height | June Discharge | July Gage height | July Discharge | August Gage height | August Discharge | September Gage height | September Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.13 | .26 | 1.17 | .36 | 1.17 | .31 | 1.12 | .22 | | | | |
| 2 | 1.13 | .26 | 1.17 | .36 | 1.17 | .31 | 1.12 | .22 | | | | |
| 3 | 1.13 | .26 | 1.17 | .36 | 1.17 | .31 | 1.11 | .19 | | | | |
| 4 | 1.14 | .29 | 1.17 | .36 | 1.17 | .31 | 1.12 | .22 | | | | |
| 5 | 1.14 | .29 | 1.16 | .31 | 1.17 | .31 | 1.12 | .22 | | | | |
| 6 | 1.14 | .29 | 1.15 | .29 | 1.17 | .31 | 1.12 | .22 | | | | |
| 7 | 1.14 | .29 | 1.15 | .29 | 1.16 | .29 | 1.11 | .22 | | | | |
| 8 | 1.14 | .29 | 1.15 | .29 | 1.16 | .29 | 1.11 | .22 | | | | |
| 9 | 1.15 | .31 | 1.15 | .29 | 1.16 | .29 | 1.11 | .22 | | | | |
| 10 | 1.15 | .31 | 1.16 | .31 | 1.15 | .26 | 1.11 | .22 | | | | |
| 11 | 1.15 | .31 | 1.15 | .29 | 1.15 | .26 | 1.11 | .22 | | | | |
| 12 | 1.15 | .31 | 1.15 | .29 | 1.16 | .29 | 1.10 | .19 | | | | |
| 13 | 1.16 | .36 | 1.15 | .29 | 1.16 | .29 | 1.11 | .22 | | | | |
| 14 | 1.17 | .40 | 1.16 | .31 | 1.16 | .29 | 1.12 | .26 | | | | |
| 15 | 1.17 | .40 | 1.16 | .31 | 1.16 | .29 | 1.12 | .26 | | | | |
| 16 | 1.16 | .36 | 1.17 | .36 | 1.16 | .29 | 1.12 | .26 | | | | |
| 17 | 1.16 | .36 | 1.17 | .36 | 1.15 | .26 | 1.12 | .26 | | | | |
| 18 | 1.16 | .36 | a | .32 | 1.15 | .26 | 1.12 | .26 | | | | |
| 19 | 1.17 | .40 | 1.15 | .29 | 1.15 | .26 | 1.12 | .26 | | | | |
| 20 | 1.17 | .40 | 1.16 | .31 | 1.15 | .26 | 1.12 | .26 | | | | |
| 21 | 1.16 | .36 | 1.16 | .31 | 1.14 | .26 | 1.12 | .26 | | | | |
| 22 | 1.16 | .36 | 1.16 | .31 | 1.14 | .26 | 1.13 | .29 | | | | |
| 23 | 1.16 | .36 | 1.16 | .31 | 1.13 | .22 | S | 7.6 | | | | |
| 24 | 1.16 | .36 | 1.16 | .31 | 1.13 | .22 | 1.23 | .84 | | | | |
| 25 | 1.16 | .36 | 1.17 | .36 | 1.13 | .22 | 1.15 | .46 | | | | |
| 26 | 1.17 | .40 | 1.18 | .36 | 1.13 | .22 | | | | | | |
| 27 | 1.17 | .40 | 1.18 | .36 | 1.13 | .22 | | | | | | |
| 28 | 1.18 | .43 | 1.18 | .36 | 1.13 | .22 | | | | | | |
| 29 | 1.17 | .40 | 1.18 | .36 | 1.13 | .22 | | | | | | |
| 30 | 1.17 | .36 | 1.17 | .31 | 1.13 | .22 | | | | | | |
| 31 | X | X | 1.17 | .31 | X | X | | | | | X | X |
| Total | | 10.30 | | 10.01 | | | | | | | | |

| Quarter | First | Second | Third | Fourth |
|---|---|---|---|---|
| Computed / Checked | CEK | | | |
| Disch. applied / Disch. checked | KK | CEK | | |
| G.H. copied / G.H. checked | KK / CEK | CEK | | |

Period Year 1977

Max. Disch. ____ sec-ft. at ____ on ____ (G.H. ____ ft.) Max. G.H. ____ ft. at ____ on ____

Min. Disch. 0.25 sec-ft. on JAN 9 (G.H. ____ ft.) Min. G.H. ____ ft. on ____

S - DISCHARGE SUBDIVIDED. V - VARIABLE SHIFT. DISCHARGE ESTIMATED FOR "a" - No GAGE HEIGHT RECORD. "b" - ICE EFFECT.

Calendar Year 1976

M-1

PRELIMINARY RECORD

GPO 887-887

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of YELLOW ~~River~~ Creek

PRELIMINARY RECORD SUBJECT TO REVISION

Near WHITE RIVER, COLO. for the Year Ending September 30, 1977

Drainage Area 262 Square Miles. Water-Stage Recorder CONTINUOUS Ratio 1 : 6

Gage Read to ........ Once / Twice a Day by ........

# UNITED STATES DEPARTMENT OF THE INTERIOR
## GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

PRELIMINARY RECORD SUBJECT TO REVISION

WHITE RIVER, COLO. 1977 File Number { Washington 09306255 District ........

Used rating table dated No. 3

Gage heights used to half tenths between ...... and ...... feet; hundredths below and tenths above these limits.

S - DISCHARGE SUBDIVIDED V - VARIABLE SHIFT DISCHARGE

ESTIMATED FOR "a" - NO GAGE HEIGHT RECORD "b" - ICE EFFECT

Max. Disch. ........ Sec.-ft. at ........ (G. H. ........ ft.), Max. G. H. ........ ft. at ........

Min. Disch. ........ Sec.-ft. on ........ (G. H. ........ ft.), Min. G. H. ........ ft. on ........

| Day | Oct. Gage height | Oct. Discharge | Nov. Gage height | Nov. Discharge | Dec. Gage height | Dec. Discharge | Jan. Gage height | Jan. Discharge | Feb. Gage height | Feb. Discharge | Mar. Gage height | Mar. Discharge | Apr. Gage height | Apr. Discharge | May Gage height | May Discharge | June Gage height | June Discharge | July Gage height | July Discharge | Aug. Gage height | Aug. Discharge | Sept. Gage height | Sept. Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 4.68 | 0.98 | 4.72 | 1.8 | 4.65 | 0.64 | 4.54 | .70 | 4.64 | 1.0 | 4.77 | 1.8 | 4.83 | 2.1 | 4.76 | 1.6 | 4.66 | .84 | | | | | | |
| 2 | 4.70 | 1.1 | 4.74 | 1.9 | 4.63 | .70 | 4.56 | .54 | 4.66 | 1.0 | 4.78 | 1.9 | a | 2.1 | 4.76 | 1.6 | 4.65 | .80 | | | | | | |
| 3 | 4.72 | 1.2 | 4.72 | 1.8 | 4.65 | .80 | 5.14 | .44 | 4.66 | 1.0 | 4.78 | 1.9 | CLK. STOPPED | 2.1 | 4.75 | 1.6 | 4.64 | .76 | | | | | | |
| 4 | 4.71 | 1.2 | 4.72 | 1.8 | 4.67 | .82 | 5.61 | .37 | 4.68 | 1.1 | 4.76 | 1.7 | | 2.2 | 4.73 | 1.4 | 4.62 | .70 | | | | | | |
| 5 | 4.70 | 1.2 | 4.73 | 1.9 | 4.69 | .86 | 5.12 | .38 | 4.69 | 1.1 | 4.74 | 1.6 | | 2.2 | 4.72 | 1.4 | 4.60 | .65 | | | | | | |
| 6 | 4.70 | 1.3 | 4.72 | 1.8 | 4.73 | .90 | 4.93 | .39 | 4.70 | 1.2 | 4.76 | 1.7 | | 2.2 | 4.70 | 1.2 | 4.61 | .67 | | | | | | |
| 7 | 4.70 | 1.4 | 4.71 | 1.8 | 4.72 | 1.0 | 4.93 | .41 | 4.71 | 1.2 | 4.78 | 1.8 | a | 2.3 | 4.68 | 1.2 | 4.61 | | | | | | | |
| 8 | 4.69 | 1.3 | 4.72 | 1.8 | 4.67 | 1.0 | 5.15 | .43 | 4.66 | 1.2 | 4.80 | 1.9 | 4.86 | 2.3 | 4.68 | 1.2 | 4.68 | | | | | | | |
| 9 | 4.70 | 1.4 | 4.73 | 1.9 | 4.67 | 1.1 | 5.37 | .44 | 4.68 | 1.2 | 4.79 | 1.8 | 4.86 | 2.3 | 4.67 | 1.1 | 4.71 | | | | | | | |
| 10 | 4.71 | 1.4 | 4.73 | 1.8 | 4.70 | 1.1 | 5.50 | .45 | 4.69 | 1.2 | 4.78 | 1.8 | CLK. STP. a | 2.3 | 4.67 | 1.1 | 4.66 | | | | | | | |
| 11 | 4.71 | 1.5 | 4.73 | 1.8 | 4.73 | 1.1 | 5.67 | .47 | 4.71 | 1.3 | 4.78 | 1.8 | a | 2.3 | 4.68 | 1.1 | 4.64 | | | | | | | |
| 12 | 4.71 | 1.5 | 4.72 | 1.7 | 4.72 | 1.1 | 5.66 | .48 | 4.71 | 1.5 | 4.77 | 1.7 | a | 2.3 | 4.68 | 1.1 | 4.63 | | | | | | | |
| 13 | 4.72 | 1.6 | 4.77 | 1.7 | 4.77 | 1.1 | 5.66 | .50 | 4.73 | 1.6 | 4.82 | 2.0 | 4.85 | 2.3 | 4.68 | 1.1 | 4.62 | | | | | | | |
| 14 | 4.72 | 1.6 | 4.72 | 1.7 | 4.85 | 1.1 | 5.66 | .52 | 4.74 | 1.7 | 4.80 | 1.9 | CLK. STOPPED a | 2.1 | 4.72 | 1.3 | 4.61 | | | | | | | |
| 15 | 4.72 | 1.6 | 4.72 | 1.7 | 4.80 | 1.1 | 5.65 | .54 | 4.73 | 1.6 | 4.79 | 1.8 | a | 2.0 | 4.72 | 1.3 | 4.61 | | | | | | | |
| 16 | 4.72 | 1.6 | 4.76 | 1.8 | 4.74 | 1.1 | 5.65 | .56 | 4.76 | 1.8 | 4.80 | 1.9 | a | 2.0 | 4.72 | 1.2 | 4.62 | | | | | | | |
| 17 | 4.72 | 1.6 | 4.75 | 2.0 | 4.72 | 1.1 | 5.64 | .58 | 4.78 | 1.9 | 4.82 | 2.0 | 4.81 | 2.0 | 4.71 | 1.2 | 4.61 | | | | | | | |
| 18 | 4.72 | 1.6 | 4.77 | 2.2 | 4.68 | 1.1 | 5.65 | .60 | 4.78 | 1.9 | 4.82 | 2.0 | 4.81 | 2.0 | 4.70 | 1.2 | 4.61 | | | | | | | |
| 19 | 4.73 | 1.7 | 4.76 | 2.1 | 4.71 | 1.1 | 5.64 | .62 | 4.77 | 1.8 | 4.81 | 2.0 | 4.82 | 2.0 | 4.70 | 1.2 | 4.61 | | | | | | | |
| 20 | 4.71 | 1.6 | 4.69 | 1.7 | 4.75 | 1.1 | 5.64 | .64 | 4.75 | 1.7 | 4.82 | 2.0 | 4.79 | 1.8 | 4.70 | 1.2 | 4.61 | | | | | | | |
| 21 | 4.69 | 1.5 | 4.71 | 1.8 | 4.82 | 1.1 | 5.64 | .66 | 4.77 | 1.8 | 4.82 | 2.0 | 4.78 | 1.8 | 4.70 | 1.1 | 4.62 | | | | | | | |
| 22 | 4.68 | 1.4 | 4.76 | 2.1 | 4.77 | 1.1 | 5.64 | .68 | 4.82 | 2.2 | 4.83 | 2.1 | 4.78 | 1.8 | 4.70 | 1.1 | 4.62 | | | | | | | |
| 23 | 4.70 | 1.6 | 4.74 | 2.0 | 5.07 | 1.1 | 5.73 | .70 | 4.78 | 1.9 | 4.86 | 2.3 | 4.77 | 1.7 | 4.68 | 1.0 | 4.60 | | | | | | | |
| 24 | 4.70 | 1.6 | 4.76 | 2.1 | 5.17 | 1.1 | 5.86 | .73 | 4.79 | 1.9 | 4.89 | 2.6 | 4.77 | 1.7 | 4.67 | .98 | | | | | | | | |
| 25 | 4.69 | 1.5 | 4.78 | 2.3 | 4.95 | 1.1 | 4.56 | .76 | 4.76 | 1.7 | 4.90 | 2.7 | 4.77 | 1.7 | 4.67 | .98 | | | | | | | | |
| 26 | 4.70 | 1.6 | 4.73 | 1.1 | 4.89 | 1.1 | 4.58 | .82 | 4.73 | 1.6 | 4.88 | 2.5 | 4.73 | 1.5 | 4.67 | .93 | | | | | | | | |
| 27 | 4.69 | 1.6 | 4.69 | .50 | 4.84 | 1.1 | 4.61 | .84 | 4.77 | 1.8 | 4.88 | 2.5 | 4.76 | 1.7 | 4.67 | .93 | | | | | | | | |
| 28 | CLK. STOPPED a | 1.7 | 5.01 | .50 | 4.72 | 1.1 | 4.60 | .90 | 4.75 | 1.7 | 4.86 | 2.3 | 4.78 | 1.8 | 4.67 | .93 | | | | | | | | |
| 29 | a | 1.7 | 5.04 | .50 | 4.87 | 1.1 | 4.60 | .96 | X | X | 4.84 | 2.2 | 4.78 | 1.8 | 4.68 | .98 | | | | | | | | |
| 30 | 4.74 | 1.8 | 4.74 | .58 | 5.35 | 1.1 | 4.60 | .98 | X | X | 4.84 | 2.2 | 4.76 | 1.7 | 4.66 | .88 | | | | | | | | |
| 31 | 4.73 | 1.8 | X | X | 5.02 | .84 | 4.63 | 1.0 | X | X | 4.84 | 2.2 | X | X | 4.65 | .84 | X | X | | | | | | |
| Total | | 46.18 | | 50.18 | | 31.76 | | 19.09 | | 42.60 | | 62.60 | | 60.10 | | 35.95 | | | | | | | | |
| Mean | | | | | | | | | | | | | | | | | | | | | | | | |
| Second-feet per square mile | | | | | | | | | | | | | | | | | | | | | | | | |
| Run-off in inches | | | | | | | | | | | | | | | | | | | | | | | | |
| Run-off in acre-feet | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum | | | | | | | | | | | | | | | | | | | | | | | | |

Calendar Year 1976: 534.38

Water Year 1977

M-2

| Quarter | | | |
|---|---|---|---|
| First | Computed BME | Checked CEK | Date 3-15-77 |
| Second | BME | | |
| First | Dsch. applied BME | Dsch. checked CEK | Date 3-15-77 |
| Second | BME | | |
| First | G. H. copied BME | G. H. checked CEK | Date 3-15-77 |
| Second | BME | | |

PRELIMINARY RECORD

PRELIMINARY RECORD SUBJECT TO REVISION

GPO 887-887

9-199-a. July 1967

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of CORRAL GL. BELOW WATER GULCH River/Creek

Near RANGELY, COLORADO for the Year Ending September 30, 1977

Drainage Area 8 Square Miles. Water-Stage Recorder CONTINUOUS Ratio 1 : 6

PRELIMINARY RECORD SUBJECT TO REVISION

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

CORRAL GL. BELOW WATER GL. NR. RIO BLANCO, CO. 1977

File Number: Washington 09306235; District

Used rating table dated No. 3

Gage Read to ... Once/Twice a Day by ...

PRELIMINARY RECORD SUBJECT TO REVISION

Gage heights used to half tenths between ... and ... feet; hundredths below and tenths above these limits.

Max. Disch. ... Sec.-ft. at ... on ... (G. H. ... ft.). Max. G. H. ... ft. at ... on

Min. Disch. ... Sec.-ft. on ... (G. H. ... ft.). Min. G. H. ... ft. on

S - DISCHARGE SUBDIVIDED. V - VARIABLE SHIFT. DISCHARGE ESTIMATED FOR "a" - NO GAGE - HEIGHT RECORD. "b" - ICE EFFECT. * OBS. OF NO FLOW.

| Day | Oct. Gage height | Oct. Discharge | Nov. Gage height | Nov. Discharge | Dec. Gage height | Dec. Discharge | Jan. Gage height | Jan. Discharge | Feb. Gage height | Feb. Discharge | Mar. Gage height | Mar. Discharge | Apr. Gage height | Apr. Discharge | May Gage height | May Discharge | June Gage height | June Discharge | July Gage height | July Discharge | Aug. Gage height | Aug. Discharge | Sept. Gage height | Sept. Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.15 | 0.18 | 1.13 | 0.11 | | 0 | | | | 0 | a | 0 | S | .14 | a | | | 0 | S | .01 | | | | |
| 2 | 1.16 | .20 | 1.15 | .11 | | 0 | | | | 0 | a | 0 | S | .02 | | | a | 0 | S | .01 | | | | |
| 3 | 1.15 | .18 | 1.13 | .12 | | 0 | | | | 0 | a | 0 | | 0 | | | | 0 | S | .01 | | | | |
| 4 | 1.14 | .16 | 1.13 | .10 | | 0 | | | | 0 | | 0 | | | | | | 0 | S | .01 | | | | |
| 5 | 1.14 | .16 | 1.13 | .07 | | 0 | | | | 0 | | 0 | | | | | | 0 | S | .01 | | | | |
| 6 | 1.14 | .16 | 1.10 | .06 | | 0 | | | | 0 | | 0 | | | | | | 0 | S | .01 | | | | |
| 7 | 1.15 | .18 | 1.12 | .06 | | 0 | | | | 0 | 1.07 | .03 | | | | | | 0 | a | .01 | | | | |
| 8 | 1.15 | .18 | 1.10 | .06 | | 0 | | | | 0 | 1.08 | .03 | | | | | | 0 | | .01 | | | | |
| 9 | 1.13 | .16 | 1.10 | .06 | | 0 | | | | 0 | | 0 | | | | | | 0 | | .01 | | | | |
| 10 | 1.13 | .16 | 1.11 | .06 | | 0 | | | | 0 | | 0 | | | CLK. STOPPED. NO R.I.S. | | | 0 | | .01 | | | | |
| 11 | 1.13 | .16 | 1.10 | .06 | | 0 | | | | 0 | | 0 | | | | | CLOCK STOPPED | 0 | CLOCK STOPPED | .01 | | | | |
| 12 | 1.13 | .16 | 1.15 | .07 | | 0 | | | | 0 | | 0 | | | | | | 0 | | .01 | | | | |
| 13 | 1.12 | .14 | 1.15 | .10 | | 0 | | NO FLOW | | 0 | 1.10 | .02 | | | | | | 0 | | .01 | | | | |
| 14 | 1.13 | .16 | 1.12 | .08 | | 0 | | | | 0 | | 0 | | | | | | 0 | | .01 | | | | |
| 15 | 1.12 | .14 | 1.10 | .06 | | 0 | | | | 0 | | 0 | a | | | | a | 0 | | .01 | | | | |
| 16 | 1.12 | .14 | 1.10 | .05 | | 0 | | | | 0 | 1.05 | | | | | NO FLOW | | 0 | | .01 | | | | |
| 17 | 1.12 | .14 | 1.10 | .04 | | 0 | | | 1.03 | .01 | 1.10 | | | | | | | 0 | | .01 | | | | |
| 18 | 1.11 | .10 | 1.08 | .03 | | 0 | | | 1.03 | .03 | 1.15 | | | | | | | 0 | a | .01 | | | | |
| 19 | 1.13 | .12 | 1.06 | .01 | S | .34 | | | 1.04 | .03 | 1.09 | | | | a | | | 0 | 1.02 | .01 | | | | |
| 20 | 1.14 | .14 | 1.04 | 0 | | 0 | | | 1.03 | .03 | 1.14 | | | | | | | 0 | S | .01 | | | | |
| 21 | 1.14 | .14 | 1.05 | 0 | | 0 | | | 1.04 | .01 | 1.07 | | CLOCK STOPPED. NO R.I.S. | | | | | 0 | 1.04 | .03 | | | | |
| 22 | 1.15 | .14 | 1.10 | 0 | | 0 | | | | 0 | 1.05 | | | | a | | | 0 | 1.02 | .01 | | | | |
| 23 | 1.15 | .14 | 1.16 | 0 | | 0 | | | | 0 | 1.06 | | | | | | | 0 | S | 2.9 | | | | |
| 24 | 1.14 | .14 | 1.15 | .01 | | 0 | | | | 0 | 1.04 | | | | | | | 0 | a | .20 | | | | |
| 25 | 1.15 | .14 | 1.15 | .02 | | 0 | | | a | 0 | 1.03 | | | | | | | 0 | a | 0 | | | | |
| 26 | 1.13 | .10 | 1.13 | .02 | | 0 | | | CLK STOPPED | 0 | 1.03 | | | | a | | | 0 | a | 0 | | | | |
| 27 | 1.15 | .10 | a | 0 | | 0 | | | | 0 | 1.03 | | | | | | | 0 | | 0 | | | | |
| 28 | 1.15 | .10 | FLT. ON MUD | 0 | | 0 | | | a | 0 | | 0 | | | | | S | .01 | | 0 | | | | |
| 29 | 1.14 | .10 | | 0 | | 0 | | | X | X | | 0 | | | | | S | 0 | | 0 | | | | |
| 30 | 1.15 | .10 | a | 0 | | 0 | | | X | X | S | .02 | a | | | | S | .01 | | 0 | | | | |
| 31 | 1.14 | .10 | X | X | | 0 | | | X | X | S | .07 | X | X | | | X | X | | 0 | | | | |
| Total | | 4.42 | | 1.36 | | 0.34 | | 0 | | 0.11 | | | | | | 0 | | .02 | | | | | | |

Calendar Year 1976: 34.42

Mean; Second-feet per square mile; Run-off in inches; Run-off in acre-feet; Maximum; Minimum

M-3

| Day | Quarter | First | Second | Third | Fourth |
|---|---|---|---|---|---|
| 1–7 | Computed / Checked / Date | | | | |
| 8–15 | Disch. applied / Disch. checked / Date | KK | | | |
| 16–31 | G. H. copied / G. H. checked / Date | KK | | | |

Period: WATER YEAR 1977

PRELIMINARY RECORD

PRELIMINARY RECORD

GPO 887-887

July 1937

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of DRY FORK River/Creek

Near RANGELY, COLORADO for the Year Ending September 30, 19 77

Drainage Area 2.74 Square Miles. Water-Stage Recorder CONTINUOUS Ratio 1 : 6

Gage Read to ________ Once/Twice a Day by ________

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

DRY FORK
NR. RANGELY, CO.
1977

File Number { Washington 09306237
District ________

Used rating table dated NO. 2

Gage heights used to half tenths between ____ and ____ feet; hundredths below and tenths above these limits.

| Day | October Gage height | October Discharge | November Gage height | November Discharge | December Gage height | December Discharge | January Gage height | January Discharge | February Gage height | February Discharge | March Gage height | March Discharge | April Gage height | April Discharge | May Gage height | May Discharge | June Gage height | June Discharge | July Gage height | July Discharge | August Gage height | August Discharge | September Gage height | September Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 2 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 3 | | | | | | | | | | | | | * | | | | | | | 0 | | | | |
| 4 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 5 | | | | | | | | | | | | | | | * | | | | | 0 | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 9 | | | | | * | | | | | | | | | | | | | | | 0 | | | | |
| 10 | | | | | | | | | | | | | | | * | | | | | 0 | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 13 | | | | | | | | | | | | | * | | | | | | | 0 | | | | |
| 14 | | | | | | | | | | | * | | | | | | * | | | 0 | | | | |
| 15 | | | | | | | | | | | * | | | | | | | | | 0 | | | | |
| 16 | | NO FLOW | | NO FLOW | | NO FLOW | | NO FLOW | | NO FLOW | | NO FLOW | | NO FLOW | * | NO FLOW | | | | 0 | | | | |
| 17 | | | | | | | | | | | | | | | | | | | * | 0 | | | | |
| 18 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 19 | | | | | | | *a | | | | | | | | | | | | | 0 | | | | |
| 20 | | | | | | | a | | | | | | | | | | | | | 0 | | | | |
| 21 | * | | | | | | | | | | | | | | | | | | S | .01 | | | | |
| 22 | | | | | | | | | | | *1 | | | | | | | | | 0 | | | | |
| 23 | | | | | | | | | | | | | | | | | | | S | 2.5 | | | | |
| 24 | | | | | | | | | * | | | | | | | | | | | 0 | | | | |
| 25 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 26 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 27 | | | | | | | | | | | | | | | | | * | | | 0 | | | | |
| 28 | | | | | | | | | | | | | | | | | | | | 0 | | | | |
| 29 | | | | | | | | | X | X | | | | | | | | | | 0 | | | | |
| 30 | | | | | | | | | X | X | | | | | | | | | | 0 | | | | |
| 31 | | | X | X | | | | | X | X | | | X | X | | | X | X | | 0 | | | X | X |
| Total | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | | | 2.51 | | | | |
| Mean Second-feet per square mile | | | | | | | | | | | | | | | | | | | | | | | | |
| Run-off in inches. Run-off in acre-feet. | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum | | | | | | | | | | | | | | | | | | | | | | | | |

| Quarter | First | Second | Third | Fourth |
|---|---|---|---|---|
| Computed / Checked / Date (days 1–7) | — | CEK | — | |
| Disch. applied / Disch. checked / Date (days 8–18) | — | CEK | — | |
| G. H. copied / G. H. checked / Date (days 19–29) | — | CEK | — | |

Passed WATER 1977

Max. Disch. ____ Sec.-ft. at 1930 on JULY 23 (G. H. 3.16 ft.). Max. G. H. ____ ft. at ____ on
Min. Disch. ____ Sec.-ft. on ____ (G. H. ____ ft.). Min. G. H. ____ ft. on

S - DISCHARGE SUBDIVIDED V - VARIABLE SHIFT DISCHARGE ESTIMATED
FOR "a" - NO GAGE HEIGHT RECORD "b" - ICE EFFECT
* - OBSERVATION OF NO FLOW

Calendar Year 1976

M-4

GPO 887-867

9-190-a. July 1907

Daily Gage Height, in Feet, and Discharge, in Second-Feet, of Box ELDER GULCH River Creek

Near RANGELY, COLORADO for the Year Ending September 30, 19 77

Drainage Area 10.3 Square Miles. Water-Stage Recorder CONTINUOUS Ratio 1 : 6

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

Gage Read to ........ Once / Twice a Day by ........

BOX ELDER GL.
NR. RANGELY, COLO.
1977.

File Number { Washington 09306240 / District ........

Used rating table dated No. 2

Gage heights used to half tenths between ...... and ...... feet; hundredths below and tenths above these limits.

Max. Disch. 82 Sec.-ft. at 2130 on JULY 23 (G. H. 1.40 ft.) Max. G. H. ...... ft. at ...... on ......

Min. Disch. 0 Sec.-ft. on MOST DAYS (G. H. ...... ft.) Min. G. H. ...... ft. on ......

S - DISCHARGE SUBDIVIDED. V - VARIABLE SHIFT. DISCHARGE ESTIMATED FOR "a" - NO GAGE HEIGHT RECORD. "b" - ICE EFFECT * OBS. OF NO FLOW

| Day | October Gage height | October Discharge | November Gage height | November Discharge | December Gage height | December Discharge | January Gage height | January Discharge | February Gage height | February Discharge | March Gage height | March Discharge | Day | April Gage height | April Discharge | May Gage height | May Discharge | June Gage height | June Discharge | July Gage height | July Discharge | August Gage height | August Discharge | September Gage height | September Discharge |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | a | | | | | | | | 1 | | | a | | | | | 0 | | | | |
| 2 | | | | | | | | | | | * | | 2 | | | | | | | | 0 | | | | |
| 3 | | | | | | | | | | | | | 3 | | | | | | | | 0 | | | | |
| 4 | | | | | | | | | | | a | | 4 | | | | | | | | 0 | | | | |
| 5 | | | | | CLOCK STOPPED | | | | | | | | 5 | | | | | | | | 0 | | | | |
| 6 | | | | | | | | | | | | | 6 | | | | | | | | 0 | | | | |
| 7 | | | | | | | | | | | | | 7 | | | CLOCK STOPPED | | | | | 0 | | | | |
| 8 | | | | | | | | | | | | | 8 | | | | | | | | 0 | | | | |
| 9 | | | | | | | | | | | CLOSED | | 9 | | | | | | | | 0 | | | | |
| 10 | | | | | * a | | | | | | | | 10 | | | | | | | | 0 | | | | |
| 11 | | | | | | | | | | | | | 11 | | | a | | | | | 0 | | | | |
| 12 | | | | | | | | | | | | | 12 | | | * | | | | | 0 | | | | |
| 13 | * | | | | | | | | | | STATION | | 13 | | | | | * a | | | 0 | | | | |
| 14 | | | | | | | | | | | * | | 14 | * a | | | | a | | | 0 | | | | |
| 15 | | FLOW | | FLOW | | FLOW | | | | | | | 15 | | | | | | | | 0 | | | | |
| 16 | | | | | | | | No FLOW | | No FLOW | | No FLOW | 16 | | No FLOW | * | No FLOW | | No FLOW | | 0 | | | | |
| 17 | | NO | | NO | | NO | | | | | | | 17 | | | | | | | | 0 | | | | |
| 18 | | | | | | | | | | | | | 18 | | | | | | | | 0 | | | | |
| 19 | | | | | | | a | | | | | | 19 | | | | | | | | 0 | | | | |
| 20 | | | | | | | a | | | | a | | 20 | | | | | | | | 0 | | | | |
| 21 | * | | | | | | * a | | | | | | 21 | | | | | | | | 0 | | | | |
| 22 | | | | | | | | | | | | | 22 | | | | | | | | 0 | | | | |
| 23 | | | | | | | | | | | | | 23 | CLOCK STOPPED | | | | | | 5 | .11 | | | | |
| 24 | | | | | | | | | * | | | | 24 | | | | | | | 5 | .16 | | | | |
| 25 | | | | | | | | | | | | | 25 | | | | | | | | 0 | | | | |
| 26 | | | | | | | | | | | | | 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | 27 | | | | | | | | | | | | |
| 28 | | | CLK. STOPPED a | | | | | | | | | | 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | X | X | | | 29 | | | | | | | | | | | | |
| 30 | | | a | | | | | | X | X | | | 30 | a | | | | | | | | | | | |
| 31 | | | X | X | | | | | X | X | | | 31 | X | X | | | X | X | | | | | X | X |
| Total | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | | 0 | | 0 | | 0 | | | | | | |
| Mean Second-feet per square mile | | | | | | | | | | | | | | | | | | | | | | | | | |
| Run-off in inches. Run-off in acre-feet. | | | | | | | | | | | | | | | | | | | | | | | | | |
| Maximum | | | | | | | | | | | | | | | | | | | | | | | | | |
| Minimum | | | | | | | | | | | | | | | | | | | | | | | | | |

Calendar Year 1976: 18.14

M-5

| Quarter | First | Second | Third | Fourth |
|---|---|---|---|---|
| Computed | CEK | | | |
| Checked | | | | |
| Date | | | | |
| Disch. applied | CEK | CEK | | |
| Disch. checked | PJG | | | |
| Date | June 27 | | | |
| G. H. copied | CEK | CEK | | |
| G. H. checked | PJG | | | |
| Date | June 27 | | | |

Water Year 1977

GPO 887-867